Jamaica Bay Ethnographic Overview and Assessment

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Executive Summary

This is an ethnographic inventory and assessment of the populations and communities residing in the watershed formed by the Jamaica Bay estuary. It is intended to assist managers and planners of Gateway National Recreation Area to better understand changes in uses of Jamaica Bay resources since the National Recreation Area was created by Congress in 1972. The findings and analysis are also for use wherever appropriate to inform the on-going Gateway General Management Plan (GMP/EIS). The study applies basic social scientific methods to analyze major dimensions of change over the past forty years of Jamaica Bay's history. These methods include demographic analysis of 1970-2008 Census data for the urban region defined as the area encompassed by the Jamaica Bay estuary (see Chapter 3). Ethnohistorical methods are applied (especially in Chapter 2) to analysis of changes in the settlement patterns of populations in and around the bay. Ethnographic data derived from participation at numerous meetings, public events, and park locations, and in-depth interviews of key informants from selected Jamaica Bay user groups are supplemented with data and extensive materials available on relevant web sites. For selected populations, the report provides first-hand accounts of changing uses of Jamaica Bay resources. The last chapter of the study discusses the implications of study findings for Gateway's planning and public outreach.

An ethnohistorical overview of the Jamaica Bay watershed reviews the significant periods and environmental consequences of Jamaica Bay settlement from the time of first European contact, through the present. The analysis reveals a number of significant legacies and historical themes that could become interpretive resources for Gateway. These include the Moses era legacies of environmental preservation on the one hand, and local expropriation on the other. Closely related are the legacies of a distinctive religious ecology and strong traditions of citizen activism, including activists devoted primarily to the bay's natural resource. Since Gateway's creation, the populations and local culture has been most influenced by the drug epidemic of the 1980s, the disasters of 9/11 and of November 12, 2003, and by rapid population change due to immigration especially over the past twenty years.

A number of demographic changes and trends stand out in importance. The effects of large-scale immigration into the New York and New Jersey metropolitan area have brought new cultural groups into the communities and neighborhoods, while geographic mobility and aging have diminished the populations of residents from Irish, Italian, Jewish and African-American backgrounds in the communities and neighbor-

hoods around Jamaica Bay.

Between 1970 and 1980 the Jamaica Bay watershed area lost over 7% of its total population. The region did not return to or surpass its 1970 population totals until rapid population growth (largely accounted for by increases in immigrant settlement) in the area occurred between 1990 and 2000. In that period the watershed's population expanded by almost 170,000 persons, an average of 1% each year for a total change of 10% in the decade. After 2000, and especially after 9/11, population growth in the watershed slowed to about 0.35 per year, or approximately 3.5% for the decade.

Between 1980 and 2008, the White-Non Hispanic population of the Jamaica Bay Watershed lost 313,000 persons, a decline of 37%. In the past thirty years the White non-Hispanic population of the watershed declined from almost 50% in 1980, to an estimated 26.5% in 2008. In the same period, the population of Hispanics increased from 11.4% to 16.5%, while Black, non-Hispanics increased their population proportion from 36.8% to 44.9%. And although they remain relatively small, at 8.7% in 2008, the Asian/Pacific population is expanding rapidy in numbers and use of Jamaica Bay resources.

While the area's population is significantly more educated than it was in the early 1970s, poverty has almost doubled from 8.5% in 1970 to 17.5% in 2008. Poverty increases with distance from the Bay and is highest in Central Brooklyn, which has been true over the past forty years, although increases in inequality are most marked over the past twenty years.

Immigration into the Jamaica Bay watershed region since the 1970s has bought new cultural groups into the communities whose ranks continue to grow as the populations of older white-ethnic neighborhoods continues to decline. There are exceptions to this revealed in the demographic analysis as well. Residents of the neighborhoods adjacent to Gateway areas of Jamaica Bay maintain vital local neighborhood affiliations with close attachments to the Bay. The report provides an overview of the history and present influences of the older Bay neighborhoods, which have a strong local culture that has been strengthened by the experience of twin disasters. But throughout the adjacent neighborhoods there are also signs of cultural change that the report describes.

Measured by the strength of historical and spiritual attachments to Jamaica Bay resources, the report identifies a number of populations for more thorough cultural assessment. These are the diverse group of baymen, boating families, naturalists, and local environmental activists, who constitute the "people of the bay" in that they have long-

standing attachments to the specific resources of Jamaica Bay. Commercial baymen, invariably termed a "dying breed," are found to be clinging to a historic way of life in the face of what they perceive as an inconsistent and confusing regulatory regime. Local environmental activists have played a major role on Jamaica Bay task forces and advisory boards and continue to do so. Their efforts are increasingly focused on mitigating adverse consequences of sewage effluent and storm water runoff. Local boating clubs and innumerable family boating groups help maintain a local recreational boating industry that sustains an historically continuous way of life on the Bay.

Attachments to the Bay by cultural groups that make use of Bay resources for religious purposes emerge from the distinctive religious ecology of the watershed area, although not all denominations make specific demands on Gateway's Jamaica Bay resources. Changes in the uses of Jamaica Bay by local Jewish populations are the result of population change and changing perceptions of Bay resources. Some neighborhoods like Canarsie have lost congregations, while others, like those of the Rockaways have gained in orthodox congregations. Increases in the religious presence along the Bay of Hindu congregations and practitioners of various forms of Santeria and other religions with African origins are also among the consequences of recent immigration, and especially the growth of Guyanese and South Asian Hindu populations, as well as Haitians and West Indians, many of whom are both Christian and practitioners of Santeria or related faiths. Gateway managers and leaders of the local Hindu congregations are developing lines of communication and understandings that are documented in Chapter 5, along with areas where relations remain problematic for Park personnel and Hindu religious groups. The study provides detailed descriptions of how these religions motivate their adherents to come to the bay's shores and marshes for particular religious rituals. It also finds, however, that none have specific spiritual or ritual attachments to particular places, sites, or other resources unique to Jamaica Bay.

The study's concluding chapter discusses some of the implications of the report's findings for Gateway planning and management. The story of Barren Island and other aspects of the Bay's ethnohistory, as presented in the study, can provide new interpretive resources for Gateway to consider developing. So can the intimate knowledge of the Bay by its remaining baymen and by families who have lived on the Bay for generations. The strength and variety of religious congregations in the watershed area offers the possibility of public engagement around issues of environmental responsibility, especially

through discussion of how the different religious resolve issues of religion and environmental awareness.

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Chapter One
Introduction and Background

Gateway National Recreation Area was established in October, 1972, "in order to preserve and protect for the use and enjoyment of present and future generations an area possessing outstanding natural and recreational features" within the greater New York Harbor region (86 § 1308). The enabling legislation permitted hunting, fishing, shellfishing, trapping and the taking of specimens on the lands and waters inside the recreation area in accordance with federal and state laws, subject to any designated zones or time periods during which these activities may not be permitted for reasons of public safety, administration, fish and wildlife management, or public use and enjoyment.

The chapters of this research study present an ethnographic assessment and inventory of how people in the communities adjacent to the Jamaica Bay/Breezy Point Unit of Gateway NRA perceive and use park resources, and especially the resources of Jamaica Bay. The federal holdings managed by the National Park Service at Gateway National Recreation Area include approximately 10,870 acres of water and 5,500 of non-contiguous acres running from the eastern boundary of Jacob Riis Park to the western-most point of the Rockaway peninsula and from Plumb Beach to the shoreline of John F. Kennedy International Airport, including lands generally located between the Belt Parkway and Jamaica Bay as well as all the islands, marshes, hassocks, submerged lands and waters in Jamaica Bay (see map). Ten percent of the total land is comprised of ocean and bay beaches, many of these secluded.

In the 1970s, the park carried out numerous research and management studies as it began to manage the recreation area. A General Management Plan (GMP) was completed in August, 1979, to guide overall park management and development for approximately 20 years. Specific objectives identified in the GMP included "to provide for and otherwise accommodate the rich cultural and ethnic diversity of the region and take sensitive account of the varying lifestyles of the people" (p. 2). This GMP has remained in place since that time. In 2008, the park initiated the process for developing a new GMP. In the Northeast region, every effort is made to assure that all park cultural resource information is current and up to date in preparation for a GMP. In this case, the park has carried out several special ethnographic projects but does not have an ethnographic overview and assessment. This Ethnographic Overview and Assessment study will provide new information about park resources important to park-associated communities and groups for the GMP, as well as contribute information about park-associ-

ated groups useful for the public participation process of the GMP/EIS project. Similar projects at other park units will be carried out in subsequent years.

Gateway's Jamaica Bay unit includes the following areas:

- Floyd Bennett Field/Bergen Beach/Plumb Beach: containing about 2340 acres of open space and the former naval facilities at Floyd Bennett Field, as well as shore lands (beaches, salt marshes) at Plumb Beach, Dead Horse Bay and Bergen Beach.
- Jamaica Bay North Shore: including the existing parklands at Canarsie, Frank Charles and Hamilton Beach Parks, undeveloped lands at Spring Creek Park, and the former landfill sites at Pennsylvania and Fountain Avenues.
- Jamaica Bay Wildlife Refuge: containing lands, marshlands, inland ponds and island habitats of the Jamaica Bay Wildlife Refuge, which is managed to ensure the perpetuation of significant wildlife species, habitats and nesting areas within the bay. Some areas are fully protected while others are available for use-by-reservation, while bay waters are available for use by boaters, fishermen and bait gatherers. The enclave community of Broad Channel lies just south of the refuge. Total land and landlocked water in this area is approximately 12000 acres.
- Breezy Point: located on the western end of the Rockaway Peninsula, this area of more than 1500 acres includes 4.75 miles of ocean beaches (such as Jacob Riis Park, West Beach and the Tip), bird nesting areas on Breezy Point, and the lands and facilities of the Fort Tilden military complex (including the beach and a wooded area). Two enclave communities lie within the area and combine to form the Breezy Point Cooperative: Roxbury and Breezy Point.

The Study Region: The Jamaica Bay Catchment Area

Gateway's Jamaica Bay Unit lies within the New York City Boroughs of Brooklyn and Queens and attracts visitors and users from throughout this region, as well as other locales within the city (Manhattan and the Bronx) and the greater New York area (Nassau, Rockland, Westchester and Suffolk counties), and beyond. The six Brooklyn communities adjacent to the park are Gerritsen Beach, Canarsie, Bergen Beach, Mill Basin, East New York and part of Sheepshead Bay. The communities adjacent to the

park in Queens are Ozone Park; Spring Creek; Howard Beach, comprised of Hamilton Beach, Ramblersville, and Old Howard Beach; and the Rockaways, including Neponsit, Belle Harbor, Arverne, Rockaway, Rockaway Park and Hammels. Brief descriptions of the histories and populations of these communities were provided in the 1979 GMP (pp. 69-70). This study significantly updates these profiles with extensive demographic, historical, and ethnographic data.

Jamaica Bay itself extends in every direction well beyond the federal boundaries of Gateway's management area. This is especially true if one includes the myriad waterways and marshes of the Jamaica bay estuary. In consequence, to fulfill is mission of protecting Jamaica Bay's natural resources, the Park Service must coordinate its efforts with numerous agencies of state and local government tht also have responsibilities for the Jamaica Bay environment. The bay also exerts a continuing influence over the ecology of human along its shores. The urban communities surrounding the bay were bounded historically by channels, creeks, and wetlands. Today many of these are entirely filled and run through culverts, and all those which remain as open water are urbanized by channeling and bulkheading. (See the Gaia Institute's analysis at www.gaiainstituteny.org/). Nonetheless, the estuarine waterways along the Belt Parkway continue to define neighborhood and community boundaries there and throughout southern Brooklyn and Queens.

The Ethnographic Overview and Assessment Study

The ethnographic overview and assessment study is programmed when park resources are known or thought to be culturally and historically associated with park neighbors, a contemporary ethnic group or groups, or entire communities located in or near a park. In the Northeast Region, such studies are commonly programmed in advance of Park Service General Management Plans (GMPs), in order to provide current information about park-associated communities to the planning process. In the ethnographic overview and assessment study, the primary research emphasis is on the collection, evaluation and analysis of pre-existing data and literature of all types, including demographic, ethnohistorical and ethnographic studies and archival sources that document the associations with, and traditional uses of, resources in the park or surrounding area by park-associated groups. Depending on the availability of pre-existing data, a secondary research emphasis is placed on the collection of information through

ethnographic and oral history interviews.

The term 'park resources' includes all forms and types of naturally occurring and human-modified or constructed geographical features, landscapes, ecosystems, species of plants, fish and animals, places, structures and objects. The ethnographic overview and assessment study focuses on those resources that have traditional and ongoing significance or importance to peoples and groups and develops understanding of the people who have formed such attachments and the nature of the connections themselves. This information is used to inform park management and interpretation, and to assist park managers to consult with the appropriate peoples and groups when particular resources are the subject of management considerations and decision-making.

The ethnographic overview study uses anthropological and sociological methods to identify and describe the park neighbors, park residents, ethnic groups, or others with historical and cultural ties and associations with, or special knowledge of, park resources, including former residents and their descendants who remain attached to the area despite having relocated. Through this type of research project, the park learns which people(s) have traditional cultural practices, values, histories and identities associated with park resources, and it develops specific information and understanding about the meanings and importance of park resources to these people and groups.

The NPS Ethnography Program was developed to document relationships between park resources and park-associated peoples and groups, which are defined in NPS Policies as those who 1) ascribe cultural importance to a National Park or the natural and cultural resources within the park; 2) whose associations precede the establishment of the park and have endured for at least two generations (approximately 40 years); and 3) whose attachments to places and resources are understood through their traditional practices, values, beliefs and identity as a coherent group or people.

Park-associated communities and groups can be identified as coherent social groupings and communities (that is, with shared sociocultural traditions, values, beliefs and identity), and are distinguished from other categories of park users such as visitors, constituents, interest groups and members of the general public due to the nature of the group and the basis of their attachment to the park. Thus, they are differentiated from self-selected groups such as user groups or recreational users like bikers and model airplane enthusiasts. These peoples or groups may include park neighbors, kinship units (such as members of extended family groups), Native Americans, ethnic and religious

groups that have traditional uses and associations with park places and resources arising from the sociocultural patterns and practices of their communities.

The Jamaica Bay Unit of Gateway NRA lies within the New York City boroughs of Brooklyn and Queens, an area that continuously undergoes relatively rapid and intense population and demographic changes. Therefore, this study departs slightly from the strict NPS definition of the Ethnographic Overview and Assessment study type in that, in addition to community, neighborhood and ethnic groups with traditional associations with the park area, it also documents the rise of newer immigrant groups that have not been present long enough to establish longer-term associations, or may not even perceive or be aware that that the park and its resources are available for cultural and recreational uses. For example, some religious groups, such as Hindu and other religious practitioners from Asia and the Caribbean regions, do not have multi-generational associations with the park but have adopted uses of park sites and resources that are important in their traditional cultural practices.

Study Objectives

1. Ethnohistoric Context of the Jamaica Bay Catchment Area

To better understand continuities and change in the populations and cultures of the park-associated communities and neighborhoods, the research develops in summary form the salient ethnohistorical information about the Jamaica Bay catchment area. For example, park planning studies conducted in the 1970s provided brief descriptions and histories of nearby Brooklyn communities, which reached three main conclusions:

1. All share a long and close relationship with the waters of Jamaica Bay since proximity to the water was the primary reason for their initial settlement.
2. The relative racial homogeneity of the communities of the residential neighborhoods that are immediately adjacent to the park.
3. Communities beyond those immediately adjacent to the park but within the catchment area tended to have more residents who were minorities and live in lowe income neighborhoods. They typically have more difficulties of access to Gateway's Jamaica Bay resources and less knowledge of their uses.

While the research for this study will focus on contemporary park connections that have continuity with earlier patterns of association, it is necessary to ground such discussions in the context of the historical, social and demographic patterns out of

which they emerged. This information will help frame the description and analysis of continuity in patterns of traditional use and association, as well as inform discussions of newer populations and groups that have important spatial and other connections to the park (or the lack thereof).

2. Demographic Characteristics of the Jamaica Bay Catchment Area

As mentioned previously, the study region has undergone significant changes in population during the 37 years since the park was established. While some communities continue to demonstrate similar population characteristics throughout this period, most have undergone some degree of transition as populations have aged and newer ethnic groups have entered the neighborhoods. This portion of the study develops information about changes and trends in demographic characteristics of park-associated communities and neighborhoods for the period 1970-2008, corresponding with the time period since the park was established. The information is presented for the appropriate community districts and, within those, specific communities and neighborhoods, depending on the availability of data.

The research documents the cultural and natural resources in the Jamaica Bay Unit that long-term park neighbors and other local users define as having cultural significance and value, or use in culturally distinctive ways. Such uses may involve recreation, subsistence and religious uses of cultural and natural resources (including open land and water spaces); plants, fish and wildlife; certain places and sites that are viewed as appropriate for certain kinds of cultural practices; and other uses that have been customarily practiced by members of local communities and neighborhoods such as those mentioned in the park's enabling legislation (hunting, fishing, shellfishing, trapping and the taking of specimens). Some communities (such as those on the Rockaways) have been more associated with the beach areas, while others (those surrounding the bay) were always more boat-oriented, including a number of boating clubs with long traditions and current – sometimes multi-generational - membership with diverse geographical and socioeconomic characteristics. This study examines the extent to which these patterns continue. Some park resources and areas have been historically associated with certain communities and groups --- the research documents the extent to which such "territorial" patterns and a sense of "ownership" of certain places are continuing in the contemporary period, and explores the basis of these associations. In other cases, patterns of traditional use have changed and may no longer be evidenced; such is the case with Riis

Park in which many of the beach bays that were formerly associated with particular social groups are now used by the general public. Alternatively, in some communities, new forms of association have been established, such as the "Eco-Watchers" organization of Broad Channel, to help enhance the bay and maintain traditional uses of its resources. The importance of Jamaica Bay to a perception and need for environmental preservation in some communities is another topic of interest for this project.

3. Newer groups are now using certain park areas.

The research documents new patterns of use that can be related to cultural practices of certain groups. For example, newer in-migrants have changed the pattern of use of Canarsie Pier and adjacent beaches, which in the past was more exclusively associated with Italian and Jewish residents (the use of Canarsie Pier, for example, for religious observances on the holidays of Rosh Hashanah). As new ethnic groups have taken up residence in nearby communities, certain park areas are subject to culturally patterned uses; for example, some evidence indicates that newer Russian immigrants are using the woods in Ft. Tilden for hunting mushrooms and informal picnics. An Ethnographic Needs Assessment conducted in 1995 revealed that the park, particularly its beach and waterfront areas, is used by various culturally distinct groups including Korean Buddhists, several Christian groups, Hasidim and other Jews, Guyanese Tamil Hindus, Paleros and Santeros for cerebrating religious holidays, healing ceremonies, baptisms, memorials, making offerings to their respective deities, and collecting medicinal plants, some of which may be used for religious purposes --- which has developed after the park was established in 1972.

As the ethnic composition of surrounding communities and neighborhoods undergoes change, it is possible that newer park neighbors are not making use of the park due to various cultural reasons, or other structural factors, of which the park is unaware. Another goal of the research is to develop information about such groups to assist the park in developing appropriate and culturally informed procedures for reaching out to these communities and groups.

Specific Objectives

- Provide demographic, cultural and historical characteristics of the communities and neighborhoods from which traditional users (and others with uses related to their cultural practices) of the park are drawn.

- Identify and describe the park sites and resources that are being used by these groups, including how, when, and why.
- Document the values and significance that traditional users from these communities and neighborhoods place on the park's sites and resources for these uses.
- Describe the nature and significance of the continuity and longevity of association with the park of these park-associated neighborhoods and communities.
- Provide information about the perceptions of the park and the effects of park management on the traditional practices and uses of these communities and groups.

Research Team. The research for this ethnographic overview and inventory was conducted between November 2009 and November 2010 under the auspices of The Center for Urban Research, Graduate Center, City University of New York and coordinated by the Center's Executive Director, Dr. John Mollenkopf. The Principle Investigator (P.I.) was Dr. William Kornblum, Professor of Sociology and Environmental Psychology and Chair, Center for Urban Research at the Graduate Center. The study's Co-PI was Kristen Van Hooreweghe, Doctoral Candidate, Graduate Center. Demographic data bases for the study, based on mergers of numerous U.S. Census files for the 1970- 2008 Census tapes, were compiled by Dr. Joseph Pierera of the Center for Social Research. Interactive demographic maps of population change in the study area were produced by Steven Romalowski, Center for Urban Research.

William Kornblum, sociologist and ethnographer, served as a member of the original Gateway Master Planning Team in the early 1970s and was responsible for compiling much of the socio-economic analysis in early Gateway planning studies . Since the mid-1970s He has continued to conduct research on issues of community ecology, race and ethnic relations, and park uses, including numerous scholarly papers and articles dealing with the human ecology of the Jamaica Bay area (see for example Kornblum et al 1974; Kornblum and Beshers 1983; Kornblum 2002). A resident of the nearby Long Beach, N.Y. since 1974, Kornblum has been sailing the waters of Jamaica Bay most summers since the early 1980s. The U.S. Civil Rights Commission cited his research and that of colleagues at the Center for Urban Research in its 1999 analysis of racial violence in

the Jamaica Bay area:

> The Howard Beach stampede of a black man to his death on a busy highway, the Central Park "wilding" attack by black youths on a white woman investment banker, and the Bensonhurst murder of a black man by a gang of Italian youth (and an assault on Latino youth in the same area a few days later) occurred almost simultaneously, and persuaded most New Yorkers that race relations were on a downward curve. John H. Mollenkopf, "Political Inequality," in Dual City: Restructuring New York, ed. John H. Mollenkopf and Manuel Castells (New York: Russell Sage Foundation, 1991), p. 350. For background on the Howard Beach and Bensonhurst attacks, see William Kornblum and James Beshers, "White Ethnicity: Ecological Dimensions," in Power Culture and Place: Essays on New York City, ed. John H. Mollenkopf (New York: Russell Sage Foundation, 1988), pp. 201-21.

Kristen Van Hooreweghe is a Doctoral Candidate in Sociology at the Graduate Center, City University of New York where she is completing a doctoral dissertation on the development of environmental awareness in the communities surrounding Jamaica Bay. She has had extensive training in ethnographic methods and completed a Masters degree in Environmental Sociology before coming to the Graduate Center. She was responsible for much of the original field research and ethnographic data collection that appears in this research.

Research Methods

The research applies a combination of literature and archival review, use of secondary data, and informal, key informant interviewing within the park-associated communities and neighborhoods. Ethnographic research was carried out with members of park-associated communities and neighborhoods to document their knowledge, history and associations with the park area and its resources.

Ethno-Historical Methods

When Gateway legislation was passed in 1972, there was relatively little historical background available in published books and papers. While primary sources were extensive, in records of land transfers, deeds, municipal minutes, health records, special studies, and newspaper archives, they were scattered and often difficult to access. As part of its planning process, the Park Service commissioned historical studies that

inventoried existing Jamaica Bay resources and began to provide a central location for on-going research about the Bay and its communities.(Bearss Hiiggins 1976). Many of these are referenced and analyzed in Gateway planning documents from the period, and from studies commissioned by the Park Service after the Park became more established during the 1980s. Over the past four decades there have been enormous changes in the availability of historical materials about the Bay and its settlement histories, just as there have been equally far-reaching changes in the ways history itself is conceived and conducted as a discipline. The social history and environmental history approaches have changed historians' orientation to their sources and to the issues they understand as relevant (Gutman, 1973, 1977; Cronin, 1983). Environmental history shifts attention to how humans have encountered and altered the natural world and how, in turn, nature has shaped human settlements and institutions. Social history challenges "top down" emphasis on the actions of recognized leaders, and along with related approaches in anthropology and sociology, place the lives and influences of unsung people at the grass roots of society in the foreground of the analysis. Social movements and social groups that alter the meaning and availability or resources in an estuarine system like Jamaica Bay thus become as important in the analysis as the actions of powerful actors like Robert Moses, which provides us with a more balanced view of historical processes. The expansion of universities and mass higher education during the same period has brought more scholars to the field, many with intense interest in social and environmental approaches to local and regional history. In consequence, their efforts over the past decades have produced far more knowledge about Jamaica Bay and urban estuaries like it than was available to researchers before. Most important of all, the rise of the Internet and the World Wide Web has democratized the pursuit of history and the range of historical materials that are now readily available.

This study draws on a knowledge base available in Jamaica Bay's digital environment that did not exist and was not imagined in 1972. Dedicated local historians and environmental activists contribute to so many web sites and blogs that park managers cannot possibly keep up with them all. The research presented here draws on and calls attention to many of them, especially those most relevant to a population and resource-based view of the Bay's ethno-history.

The term ethno-history adapts the perspectives and methods of social and environmental approaches to history, and is also closely related to the field of ethnogra-

phy in the social sciences (Feierman, 2001; MacDonaniter 04). Ethnography is a branch of anthropology dealing with the scientific description of individual cultures. It is also a methodological approach in the social sciences in which researchers observe groups and individuals in action. They draw on these experiences and conversations as data. The ethnographer's goal is to describe groups and their cultures as its members perceive it and as they explain its history, its norms and its values. The ethno-history of Jamaica Bay presented in this report, in the following chapter and in selected sections of subsequent chapters, draws on the extensive literature about the bay's peoples and cultures, much of it available in published books and articles, and much also available in numerous web sites and blogs. An exhaustive compilation of the profusion of materials about the bay that appear on the Internet, or in the literature, was beyond the scope of our resources. Our effort has been to draw on what appear to be the best published accounts and analysis and to collect first hand accounts of important turning points in the way the different groups and cultures have used resources of Jamaica Bay over time. Chapter 2 – is an overview of the rich ethno-history of Jamaica Bay, which highlights its historical phases, and the turning points of settlement and development that have most influenced the use of bay resources. The present phase of Gateway's population and community history is marked by dramatic increases in the proportion of foreign born residents of the watershed area, a subject which is developed further in the demographic analysis presented in Chapter 3.

Demographic Analysis

Demography is the study of population growth and change. Demographic data about the size and composition of populations are essential to most planning efforts, and certainly to park planning where questions of who lives within the areas served by parks are critical for decisions about facilities and programs. Gateway's first General Management Plan drew on extensive demographic analysis about populations in areas of New York City that would be within reasonable access of Jamaica Bay and other units of the new National Recreation Area. The new master planning effort for Gateway will also draw on similar demographic knowledge. In consequence, this ethnographic inventory includes a detailed analysis of the population history of the Jamaica Bay Watershed area from 1970 to 2008 (see Chapter 3).

What is the appropriate area of the city for demographic analysis of the populations that use the resources of Jamaica Bay? The Park serves national, regional, and local

visitors. Like any urban park, however, Gateway's Jamaica Bay Unit receives the greatest number of visitors from communities and neighborhoods within easy reach by foot, bike, car or bus. . For the purposes of this ethnographic inventory that "easy reach" can be defined as a twenty minute to half-hour car or bus ride to one or another Gateway facility or park area in and around Jamaica Bay. This definition of the catchment area also roughly coincides with the actual Jamaica Bay watershed area, as defined by bio-ecologists who have been working on issues of environmental restoration and preservation for Jamaica Bay. [two or three sentences on this an fn] ,

In this report we will often use the term Jamaica Bay catchment area or Watershed to refer to the populations residing in communities of Brooklyn, Queens, and southwestern Nassau County that are within the defined watershed. Jamaica Bay refers to the open waters of the region, from the Marine Parkway Bridge on the West, to the Eastern edges of the Bay behind JFK International Airport on the East, and from the Belt Parkway perimeter on the North, to the Rockaway Peninsular on the South. The larger estuarine system, which forms the entire Jamaica Bay Watershed, includes all the remaining creeks and marshes that drain into the open waters of Jamaica Bay.

New York City re-organized it's planning capacities in 1975 by creating 59 Community Districts where representatives of the community could address local planning issues and participate in the community development process. The scope and authority of the Boards in environmental review was increased in the New York City Charter revision of 1989. Each Community District has a paid manager and a Community Board composed of up to fifty members who "reside in, have a business, professional or other significant interest in that community" and who are appointed Board Membership by the Borough President (50%) and the local representative to the City Council (50%). In addition to the voting Board Members, non-members can serve on committees of the Board.

All the city's Boards have recreation and open space committees, in addition to other committees that may address environmental issues. Since its creation, the local Community Boards have been the most active public entities engaged in monitoring and reviewing Gateway policies and plans. As noted earlier, the Community Districts are also basic reporting units for charting demographic and social change in geographic areas of the city. Since 2000, the U.S. Bureau of the Census has fielded the monthly American Community Survey – which collects annual data to chart change in local geographic

areas known as Public Use Micro Areas (PUMAS(). For New York City the PUMAS have been drawn to approximate the boundaries of the city's Community Districts (the map at this url includes PUMA and Community District boundaries: (http://www.nyc.gov/html/dcp/pdf/lucds/puma_maps.pdf). For demographic analysis of population change in the Jamaica Bay Watershed, we have mapped census data from 1970 -2008 (the latter aggregating ACS data between 2006 and 2008) to conform with the existing boundaries of relevant PUMAS.

Figure 1.1: Jamaica Bay Watershed PUMAs are shown in the Brooklyn/Queens PUMA map (Source: Data US Census, Map Center For Urban Research).

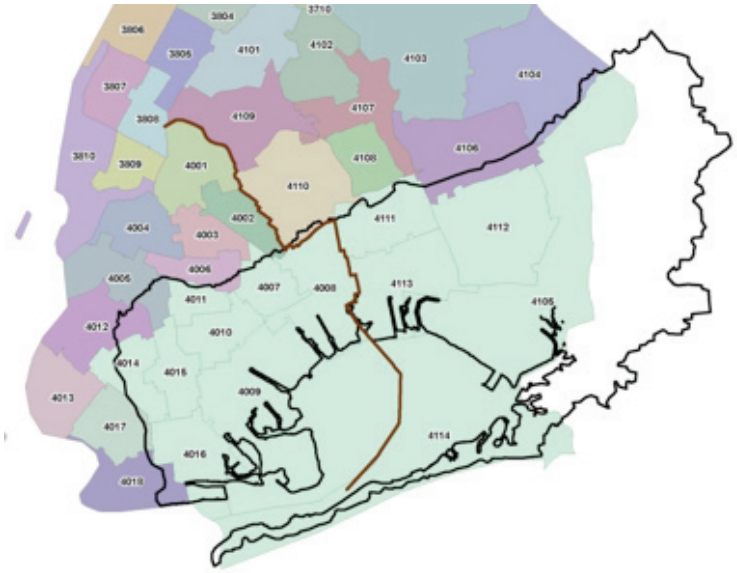
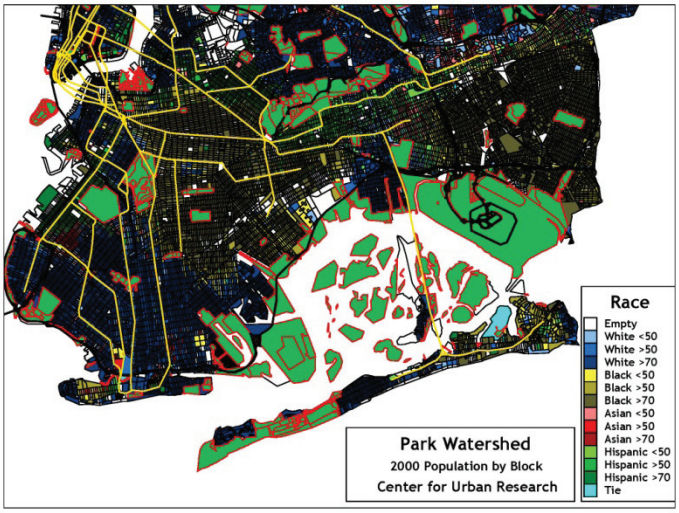


Figure 1.2: Digital Map of Census Tracts in the Jamaica Bay Watershed, by Racial and Ethnic Groups. This map can be enlarged on the screen to examine specific communities and neighborhoods within the Watershed, Race is the variable presented in this map, but others present additional variables, see appendix I. (Source: Data US Census 2000, Map Center For Urban Research).



Detailed ecological data for the block or census tract level is only available for decennial census data, which are not available for 2010 analysis at this writing. Fortunately we have been able to create a Watershed data set with PUMA level data from the American Community Survey Census sample aggregated from 2006-2008, which provides good estimates of trends likely to be confirmed in the 2010 numbers. This is also an example of how the American Community Survey can be used for demographic and planning purposes to understand continuity and change in time spans shorter than the decade. "The American Community Survey (ACS) is the cornerstone of the U.S. Census Bureau's effort to keep pace with the nation's ever-increasing demands for timely and relevant data about population and housing characteristics.

> The new survey provides current demographic, social, economic, and housing information about America's communities every year—information that until now was only available once a decade. Implementation of the ACS is viewed by many as the single most important change in the way detailed decennial census information is collected since 1940, when the Census Bureau introduced statistical sampling as a way to collect ''long-form'' data from a sample of households.
> (U.S. Census, ACS, 2010 http://www.census.gov/acs/www/Downloads/survey_methodology/acs_design_methodology_foreword.pdf)

Use of the 2008 ACS data in comparison is combined with another data base constructed from 1970,l 1980 and 2000 Census tapes. This data base construction was never a simple matter of selecting variables and running tables. Problems of data formats, changing definitions of key variables like race and ethnicity, confidentiality limits, and available of tapes had to be addressed before the full 1970-2008 series could be analyzed. See Chapter 3 for the detailed results, but the patterns of growth, decline, in and out-migration in the communities constituting the watershed area point to the remarkable speed at which the city's population can change. And the data also show continuities in bay populations, especially in those neighborhoods where residents have the strongest attachments to the bay's natural resources.

In discussing the changing demography of neighborhoods and communities along the Bay's shores, we often use 2000 Census data because it provides the latest available tract level data. It can show important trends between 1970 and 2000, which can point to likely directions of continuing change in the 2010 Census. This more detailed spatial analysis of local neighborhoods is facilitated by the series of digital maps that

allow one to zoom in on particular areas of the Watershed. In Figure 1.2, for example, one can zoom into Canarsie, for example, and see how a community which was almost entirely of European Italian and Jewish background in 1970 (and thus largely white) , had changed to a heterogeneous population by race and ethnicity in 2000. The 2008 data, although at a somewhat larger geographic scale, will show the change has only accelerated since 2000.

Ethnographic Method

To understand the consequences of rapid population change for culturally-based uses of Jamaica Bay resources, we have spoken to people in the communities who are well informed about the area and its issues. We conducted several hours' worth of in-depth participant observations at planning meetings, neighborhood events, Park visits, religious services, and at community residents' homes to obtain a general sense of what it is like to live, work, and play around the Bay. Of the people we spoke with, many are residents of different Watershed communities who have been active in its congregations, its planning boards, its environmental groups, its community action committees, and similar community and regional entities that are concerned with the bay's resources. Others are people whom we have heard speak at public events and forums and whom we have engaged in more informal conversations. Ethnographer Kristen Van Hooreweghe took the lead in this phase of the research. For over two years she has been attending Community Board meetings, specifically Brooklyn Community Boards 18 and 5 and Queens' Community Boards 10 and 14, and conducting informal ethnographic interviews with people who are knowledgeable about Jamaica Bay issues, including community leaders, Park Service employees, and regular Park visitors. In her work for this study she has narrowed her inquiry especially to what knowledgeable people tell her about aspects of bay resources or Park Service policies that may have impacts on uses of Jamaica Bay resources. In her formal and informal interviews she has employed a research protocol to guide the discussion about historical and contemporary uses of the Bay, as well as the significance of these uses for the Park-associated communities. The use of formal surveys or questionnaires is specifically barred to researchers working with the Park Service, unless they apply for special clearance from the Office of Management and Budget. The purpose of this restriction is to protect the public from unnecessary paper work and invasions of privacy. All interviewers for the ethnographic assessment were trained in methods of protecting privacy and in obtaining informed consent.

The ethnographic interviews took place either in a key informant's home, a place of business, or at a religious institution. Interviews lasted at least one hour, however, most ran several hours, with an average length of 2.5 hours per interview. We selected individuals based on the nature of their relationship to Jamaica Bay (e.g., earning livelihood from the Bay, long-time community activist, religious devotee, etc), their role within their own community (e.g., temple president, civic association leaders, Community Board chairs), and on recommendations from Park employees.

A research protocol was used as a rough guide for the interviews. The protocol was designed to elicit key informants' input on a particular group or community's historical (where appropriate) and contemporary uses of Jamaica Bay, as well as the significance of these uses for a group's cultural, religious, or ethnic identity. The interviews also gauged the ways, if any, a group's use of the Bay or other Park resources changed, the reason for that change, and any anticipated changes in the group's make-up or structure that might impact future uses of the Bay. Interviewees were asked specifically about the relationship between their group's use of the Bay and the policies of the National Park Service. Although the protocol guided the interview, key informants were given the freedom to expand on aspects of a question or to add information that might not fit neatly into any of the questions on the protocol. Participants with a particular area of expertise (e.g., Hindu spirituality or Jamaica Bay history) were asked to expand on these topics. Moreover, key informants were encouraged to share their own personal stories of the Bay, especially in instances where those experiences might be similar to others' within their community.

In addition to formal interviews, there were countless hours spent in the field conducting "field interviews" with others in and around the Bay and/or participant observations. Field interviews involve informal interviews or conversations with community members or Park visitors. Generally, field interviews could last anywhere from 5 minutes (e.g., "Catch anything?") to a half hour or more, depending on the circumstances and activity. Field interviews did not strictly adhere to the interview protocol, but the goal was to find out how a person or group used the Bay or other Park resources, how these uses have changed over time, and why they were important to a particular individual or group, or some combination thereof.

Participant observations involve observing people in their natural environments and daily lives to understand the perspectives of the Jamaica Bay communities and their

way of life. Furthermore, participant observations facilitate a better understanding of the social, cultural, and physical context of the Jamaica Bay area. Participant observations were conducted at Community Board meetings, National Park Service Open House meetings, Jamaica Bay Task Force meetings, other community planning meetings, beach clean-ups, and regular Park visits. Participant observation also involves review of print materials from the community. Therefore, local newspapers (e.g., Brooklyn Eagle, Rockaway Wave), organizational newsletters, blogs, and books about local communities were also consulted.

Interview notes, field notes, and secondary print sources (e.g., blogs, articles, media, etc) were analyzed for patterns in resource usage, its importance, and the way uses have changed. In writing the report, the goal was to let the experiences and perspectives of the communities shine through. Therefore, where possible, direct quotes or paraphrased quotes were used and participant experiences guided the structure of the report. For example, participant responses about current recreational activities (e.g., swimming, boating, open-space recreation) determined the types of activities included in the Jamaica Bay recreation section.

Throughout the study we have attempted to remain neutral on controversial issues of resource management and use. It must be said, however, that ethnographic studies that seek to understand how people from different groups and cultures perceive and interpret their experiences do tend to read as if the researchers side with their informants in controversial matters. If we include passages in which respondents are critical of the Park Service, it is not the role of the ethnographer to automatically include the views of Gateway representatives or federal policy makers. But this does not mean the authors themselves accept the perceptions and opinions of their informants as objective fact. Wherever possible, therefore, we have attempted to provide demographic and historical background that readers can use to assess for themselves the choices we have made in identifying cultural groups and in devoting time to listen to accounts of how bay resources are used (and not used). Ethnographic data, historical accounts and analysis, demographic tables and charts are used throughout the following chapters of this study and are not concentrated exclusively in specific chapters. On the other hand, where we discuss specific cultural groups and their uses of Jamaica Bay resources, we include more of the ethnographic materials and findings than in chapters based on historical and demographic analysis.

The report's concluding chapter, Chapter 6, summarizes the main findings of the study, with emphasis on continuities and change in the populations of the watershed area, and changing uses of Jamaica Bay's resources. Among other subjects, we address the need for continuing research on Gateway's publics. It was not this study's mandate to recommend policies or programs to Park Service. The study does reveal a number of possible initiatives that the Service could consider at its Jamaica Bay unit that would build on its successes to date. Among these are some that draw on the emerging resources of the Internet and the on-line communities it engenders. The chapter also devotes special attention to populations that remain under-represented among park user groups, despite proximity to the Bay. This subject raises again the important difference between the resources of Jamaica Bay and the resources of Gateway in Jamaica Bay.

In choosing to analyze population and cultural change within the Watershed created by the Jamaica Bay estuary, we have followed a lead created by recent ecological and biological studies of the Bay and its environmental issues. In 2005 the Jamaica Bay Task Force was successful in developing a Jamaica Bay Watershed Protection Plan, chaired by Co-chair: Doug Adamo, National Park Service and co-chaired by Brad Sewell of the , Natural Resources Defense Council. The Task Force also included at least two Jamaica Bay ecological activists on its advisory committee. We have used the definition of the Watershed area developed by this task force in developing indicators of demographic and cultural change from 1970- the present. Significantly, the Watershed Protection Plan this task force concluded that Jamaica Bay and its advocates face the challenge of "inadequate planning and outreach." These challenges, the task force noted, "cannot continue to be responded to on an ad hoc basis. More than twenty-five governmental agencies have jurisdictional responsibilities in Jamaica Bay and while they often confer on specific projects, their overall programs lack coordination… Finally, and most significantly, Jamaica Bay suffers from a lack of identity outside of a committed core of advocates and users." The task force further observed that:

> Jamaica Bay's beauty and opportunities are largely unknown to the New York City's residents as a whole. Limited and poor quality access to the bay has prevented even local residents from enjoying this resource and from advocating for its protection and restoration. A much greater political constituency for Jamaica Bay must be created. Otherwise, it will be difficult, if not impossible, to attract necessary public funding and to ensure that government decision makers consistently consider the bay's protection to be a priority.
> (Jamaica Bay Watershed Protection Plan, June 29, 2006 http://www.

vanalen.org/gateway/sitebrief_downloadables/Primary_Sources/09_Planning_for_Jamaica_Bays_Future_JBWPPAC_2006.pdf)

Rapid change in the composition of the populations in communities of the Watershed only increase the challenge of raising awareness of the Bay and its resources. While there is no single best approach to building the needed political constituency, one direction of effort would involve building greater awareness about the bay within the neighborhoods on its waterways. By taking the larger Watershed area as the geographic region for analysis, researchers call attention to a far larger population than that living immediately adjacent to the open waters of the bay. We have followed their lead in using the Watershed as the basis of the research presented here, especially that which charts demographic and cultural change. On the eastern edges of the bay, "behind" JFK International Airport, " for example, there is little sign of environmental restoration or protection of wetlands and live tributaries that drain into the bay. But everywhere along the bay's tributaries there is the need to build greater awareness among residents that they live on or very near waterways that are part of the Jamaica Bay estuary. Greater knowledge of the changing demography and cultures of the populations of the Watershed is essential to this effort at building public environmental awareness. The concluding chapter develops these points in more detail, drawing on the findings of the ethnographic assessment and inventory.

Chapter Two
Jamaica Bay: Populations and Communities

From a strictly bio-ecological viewpoint, Jamaica Bay is merely one of hundreds of wetlands and bay estuaries along the continent's low and gently sloping Atlantic coast. The bay itself is formed by the Rockaways, a sand peninsula, where, at its eastern tip, its waters merge into the ebb or flood of the Atlantic Ocean and the Hudson. There is nothing in its natural environment or its geomorphology alone that would make it stand out or mark it as worthy of special protection. It is the history of its changing role in the development of the New York metropolis, its emergence in the Gilded Age as a highly urbanized and polluted estuary, and finally, in the second half of the Twentieth Century, the creation of the Jamaica Bay Wildlife refuge and JFK International Airport, that brought Jamaica Bay into the consciousness of environmentally concerned writers and citizens in the region and beyond. The thematic thread that connects each phase of the Bay's history is how it fitfully came to symbolize the change from wanton exploitation of land and water resources to a new ethic of environmental understanding and restoration of its complex ecosystem. Today Jamaica Bay stands out among the nation's protected areas as the only such estuary in the United States that hosts both a world famous jetport and a world famous wildlife refuge. Gateway's Jamaica Bay Wildlife Refuge is deservedly famous as the only wildlife area in the United States, and perhaps the world, that is accessible by subway. As the National Park Service embarks on a new phase of its planning and stewardship for Jamaica's Bay's future, the question of how its resources have been conceived and exploited over the critical periods of its history remains highly relevant.

According to National Park Service guidelines for its ethnographic program:

> The term 'park resources' includes all forms and types of naturally-occurring and human-modified or constructed geographical features, landscapes, ecosystems, species of plants, fish and animals, places, structures and objects. The ethnographic overview and assessment study focuses on those resources that have traditional and ongoing significance or importance to peoples and groups and develops understanding of the people who have formed such attachments and the nature of the connections themselves.

This chapter offers an overview of the nature and variety of attachments that people in the communities have with the Bay and its resources. While a detailed history of each Jamaica Bay community is beyond the scope of this report, the chapter will review changing characteristics of the communities as human settlements with differing relationships to Jamaica Bay resources. In this regard it is helpful to review the essenti-

periods of development in and around Jamaica Bay. The uses different cultural groups make of Jamaica Bay is directly related to their cultures and to the history of their settlement in the communities along its shores.

Jamaica Bay's Resources: Historic Periods and Turning Points

For centuries between the last glacial period, about twelve thousand years ago, to the early 1600s, Jamaica Bay was settled on its northern shores by the Canarsie people, and on the Rockways by the Rechquaakie ("people of the sandy places"), from whom the contemporary spelling and pronunciation of the peninsula originates. Both people were of the Lenape branch of the great Algonquin Indian civilization which dominated much of this part of North America in the aboriginal period and at the time of first contact with European explorers. Early explorers from Verrazano (1524) to Hudson (1603) left accounts of their encounters with the Canarsie people. (Pritchard 2002). Although the major Canarsie settlements were set back from the shores of Jamaica Bay itself, the Indians made extensive use of the Bay's rich shellfish beds and its innumerable habitats for edible species of fish, animals and plants. Middens composed of discarded oyster shells were notable features of the bay's shoreline when Europeans first wrote accounts of the area. While the Canarsie were expert hunters and gatherers of Jamaica Bay's abundant natural resources, they were also extremely successful agriculturalists. According to a recent history of the city's aboriginal period, "There was once a great cornfield in Brooklyn. The breadbasket of the Canarsie, it stretched for several miles across the southeast corner of Brooklyn from Ralph Avenue in the west to the water in the east and north. (Pritchard, 2002, p. 106)."

As in so many regions of the U.S., much of the legacy of the Native Americans in the Jamaica Bay Watershed region is retained in place names. Historian Evan T. Pritchard also notes, for example, that the Rockaway claimed much of modern Queens and had their center of settlement in what is now the town of East Rockaway in Nassau County. "The old Rockaway Trail is now called Jamaica Avenue. The name Jamaica may derive from *Yau-may-ko,* the old Algonquin word for "Place of the Beaver (Pritchard 2002, p.107).

From 1635, when Dutch settlers began to establish villages in land "purchased" from the Canarsie, which they named Bruckelen (after the Indian term, "Broken Land"), to the death of the last known Canarsie Indian in 1830, the watershed region experi-

enced a transition from Indian to Dutch and English agrarian settlement. This period is marked by the steady weakening of the Indian communities through disease and outward migration toward Eastern Long Island or coastal New Jersey. The Watershed area retained its rural character during this transition, but the first industrial settlements also began appearing along the Bay. In 1845 an important offal rendering and fish-oil industry began developing on Barren Island (now Floyd Bennett Field) and by 1884 there were about 500 workers employed there, many of whom lived with their families on the island's famously odoriferous squatter settlements. Although the rendering industry gave Barren Island its early identity as an industrial place, hence the name Dead Horse Bay, for the cove on the island's western shores, the original Gateway naturalist, John Tanacredi writes that "Jamaica Bay was essentially an undisturbed wilderness until the late 1800's ranking with Great South Bay and Chesapeake Bay in the production of oysters, finfish, and other seafood." (Tanacredi 1995, p.16). The Bay was a famous supplier of shellfish to the oyster vendors and restaurateurs of the central city, who depended on steady supplies of fattened oysters for their stalls and eating places. The celebrated diarist of the New York's post-Civil War period, George Templeton Strong, remembered Brooklyn as a series of villages surrounded by farms. "a place as nonurban as he could imagine." (Stilgoe, 1988).

Image 2.1 A New York Oyster Stall
Museum of the City of New York

Railroad construction beginning in the 1880s set in motion the next period of the Bay's history, where industrialization and the development of tourism and recreation compete for development space around the bay Jamaica bay historian, Kevin Olsen, who is compiling a substantial archive of original sources of the Bay's history, includes this

description of 1881 train service across the Bay in his collection of primary sources:

> Jamaica Bay was crossed on a trestle just over four miles in length. The crossing featured draw-bridges over three of the principal channels. (History of Queens County, with illustrations, Portraits& Sketches of Prominent Families and Individuals. New York: W.W. Munsell &Co.; 1882. pp. 193-257.) There was a stop at Broad Channel. Upon reaching the Rockaway Peninsula the tracks turned west and ran for approximately another one and a half miles. There were five station stops at the various Rockaway Peninsula, Hammel's and Eldert's, Holland's Station, Seaside Station, Neptune, and the Rockaway Beach Hotel.
> (Rapid Transit to the Sea, 1881 Official Railway Guide page 79)

From the early 1880s to the first decades of the Twentieth Century, during the so-called Gilded Age, the development of hotels, amusement parks, fishing stations, and vacation communities competes for space with industrial development in and around the Bay. Railroad companies vigorously promoted tourism to Coney Island and the resorts of the Rockaways. "Visitors were promised surf bathing and 'as pleasant promenading as can be asked for.' On the bay side of the peninsula there were opportunities for 'still water bathing,' boating, and fishing."(Rapid Transit to the Sea, 1881 Official Railway Guide page 79, courtesy of Kevin Olsen). Hotels of all sizes and quality sprang up in the area, including three which were situated inside the Bay itself on the Raunt. Resorts and small amusement parks appeared in Broad Channel, Bergen Beach,and Canarsie, where by 1900 New Yorkers were flocking in droves during the "dog days" of summer. As Canarsie became a summer haven for urban residents, it quickly lost its former rural character. Since it could not compete successfully with either Coney Island or commercial development on the Rockaways, especially due to its inferior transportation access, Canarsie's Golden City Amusement Park, constructed in 1903 went out of business. The area began to deteriorate, experiencing the opposite of a Gilded Age. It's summer resorts closed and Canarsie became a refuge for poor and homeless squatters. All of these changes contributed to a stereotyped image of Canarsie as a place at the city's very bottom, almost off the map.

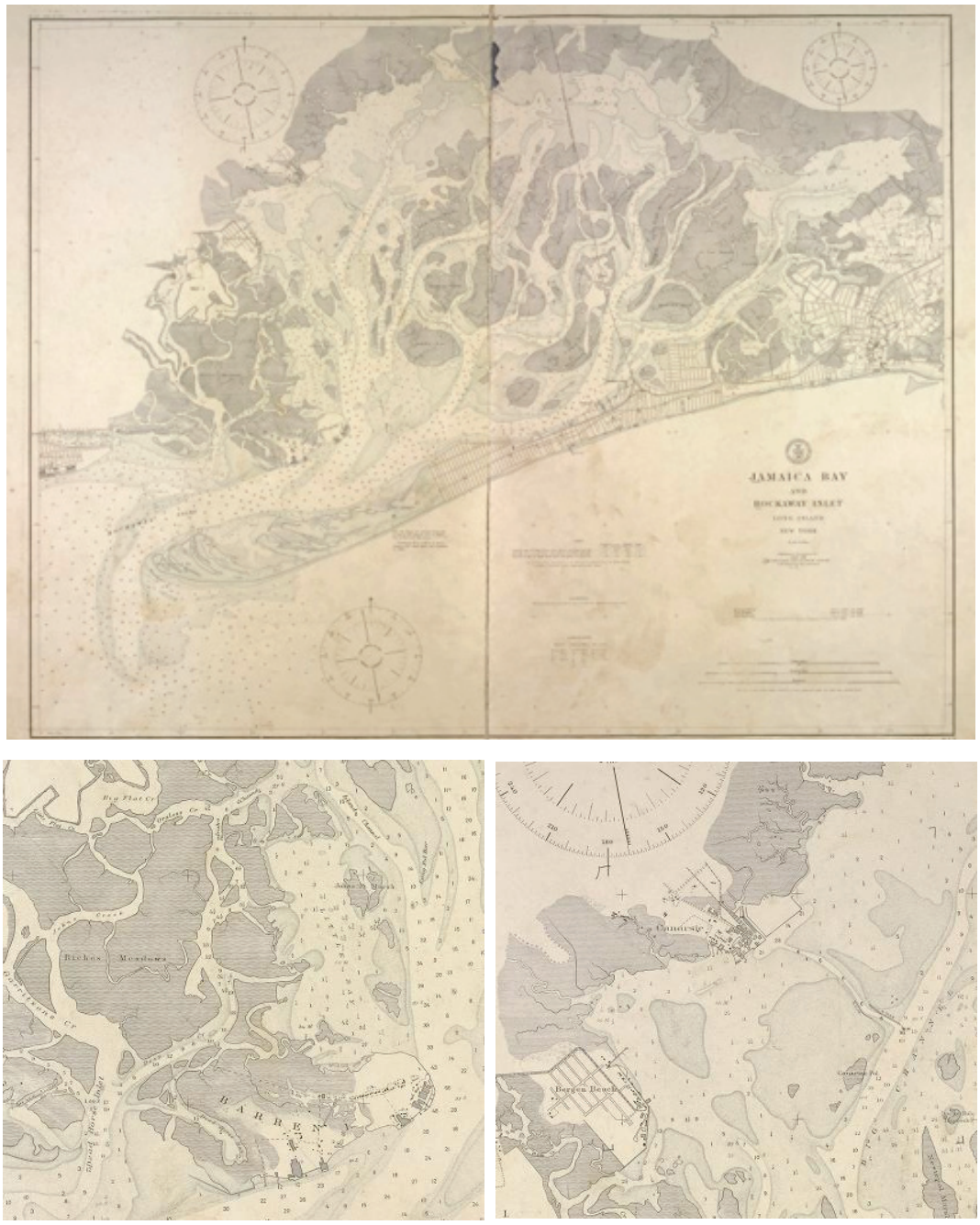


Figure 2-1: Jamaica Bay, Detailed Map,1910 (Courtesy of the New York Public Library http://digitalgallery.nypl.org/nypldigital/dgkeysearchdetail.cfm?trg=1&strucID=1860556&imageID=1692356&word=jamaica%20bay%20and%20rockaway%20inlet&s=1&notword=&d=&c=&f=&k=0&lWord=&lField=&sScope=&sLevel=&sLabel=&total=2&num=0&imgs=20&pNum=&pos=1. Available from the New York Public Library's Digital Gallery at the above URL, this map and others in the collection allow one to examine detailed land use patterns along the Bay shores.

By the end of the first decade of the Twentieth Century, the northern shore of Jamaica Bay, at Canarsie, Began Beach, and on Barren Island, was being developed es-

pecially for recreation and tourism. The amusement park at Bergan Beach was thriving. Earlier, "in the 1890s, developers Percy Williams and Thomas Adams Jr. expanded the Bergen House into a resort. In 1905, Williams added an amusement park to the island. The resort and amusement park, accessible by the Flatbush Avenue streetcar, featured a casino, roller-skating rink, boardwalk, and Vaudeville Theater" (Olsen 2010). As shown in Fig . 2-1, however, most of the channels and marshes remained intact. The two more detailed views of the 1911 nautical chart featuring Canarsie, Bergan Beach, and Barren Island in the other, show that Bergan Beach was still a marsh an island, accessible by one road over the marsh. The wetlands on Barren Island had only fill areas in two places and also remained an island in a maze of tidal channels. The odors from the try works in Dead Horse Bay were said to present a serious obstacle to the development of private property in Bergan Beach, and in Brownsville village, above Canarsie (Burrows and Wallace, 1999) . The era of large-scale land fill and channeling was about to begin.

Evidence about development in the settlements and cultures of bay communities is available as never before through data bases and internet web searches and in historical studies commissioned by the Park Service (eg. Black 1981). These materials permit detailed analysis of changes in the bay, physical, cultural, biological characteristics. Historical ethnography, as noted in Chapter 1, is a method of using these materials to present the history our mindsets, our ways of understanding and acting on the world. (Comanof and Comanoff, Kornblum) Compare these two written statements about Jamaica Bay, for example. They each describe the area around what is now Hawtree Basin.. Centuries apart, they represent two quite different understandings of Jamaica Bay resources. The first is a deed recorded in Jamaica town in 1684. The second is a factual statement about the early Twentieth Century activities of William Howard, after whom Howard Beach is named.

> Peter Stringham of Jamaica for and in consideration of 5 acres of meadow in the further East Neck have exchanged granted bargained and made over unto Daniell Denton Senr. of Jamaica a parcell of meadow at the neck called the Haw tree within the bounds of Jamaica and bounded on the front with the hither causee and to run from the end of the causee to Theodorus Polhemus fence and so westerly as the fence runs to the Haw tree great creake and bounded with the great creeke and northerly by a ditch that runs betwixt Francis Combes his meadow, and Peter Stringhams and from that ditch where it emptys itself into a small creeke to run northward to the creeke neare the boyling spring in John Hunts meadows the great haw tree creeke being the west bounds from North to South.

December 24 - 1686 Peter Stringham (L. S.)
http://www.combs-families.org/combs/records/ny/queens/jamaica.htm

Howard had acquired an additional 300 acres of seemingly useless marshland west of Haw Tree Creek in an area known as Marcela Park. After his hotel burnt he slowly began the laborious task of filling in the tidal meadows with sand dredged up from the shallows of the bay while carving straight channels through them such as Hawtree Basin dug from the mouth of the existing creek. By 1909 he founded the Howard Estates Development Company that began constructing summer homes on the newly created solid ground next to Ramblersville's shaky cottages that occasionally fell off from their perches.
(March 13, 2010, Ramblersville, Alan Petrulis,
www.metro.com/metropcblog.html)

Few if any people were living on Haw Tree creek in 1686 when this exchange of meadows occurred. The settlements were far back in the town or surrounding hamlets, with only makeshift fishing shacks and shelters here and there on the creeks and meadow edges. But without question the resources of the estuary were parceled out and looked after. They were to be, hunted and trapped on. Netted fish traps were set in the tidal rips, toothy spartina hay harvested at low tide, horses and hands constantly swatting at the green flies and gnats. A slow reading of this simple deed, and some knowledge of the bay itself as a marshland estuary, evokes the specific rural character the Jamaica Bay in colonial days, with its emerging yankee culture (too Dutch to be English, not yet American). The deed poses other questions as well for future historians of the Bay's changing ecology. What, for example, was "the boyling spring in John Hunt's meadows?"

The second passage is a contemporary statement about the real estate activities around Marcella Park on Haw Tree creek of Mr. William J. Howard, the historic developer of today's Howard Beach. Evidently, by 1909 the marshes were valued most if they could become building sites. As the detail from a 1909 Queens real estate map indicates, the entrepreneurial Mr. Howard was buying up as many of plots of marsh and meadow and platted land in the Haw Tree creek area of the bay as he could. Most of the area shown is wetland, but much of it, especially where the

Figure 2.2 Hawtree Creek
NY Public Library

platted grid begins to appear, will soon be filled. In a few more decades Haw Tree Creek would become Haw Creek Basin

Hawtree Creek was no bucolic salt meadow by the time Howard began accelerating its urbanization. The classic post card from the creek's Ramblersville settlement at the turn of the century captures well the bungalow, fishing shack ecology of the older creek settlements. A glance at contemporary (see the photos available, for example at (http://www.bridgeandtunnelclub.com/bigmap/queens/howardbeach/hawtreebasin/index.htm) land uses along modern Hawtree Basin shows that some of these structures remain, and although the bridge over the basin (constructed in 1962) helped encourage construction of larger and more substantial housing, the older turn-of-the century original ecology of the Ramblersville and Hamilton Beach neighborhoods remains visible, as it does in parts of the eastern Bay like Meadowmere Park.

Image 2.2 Hawtree Creek
(Source http://www.panoramio.com/photo/9878766)

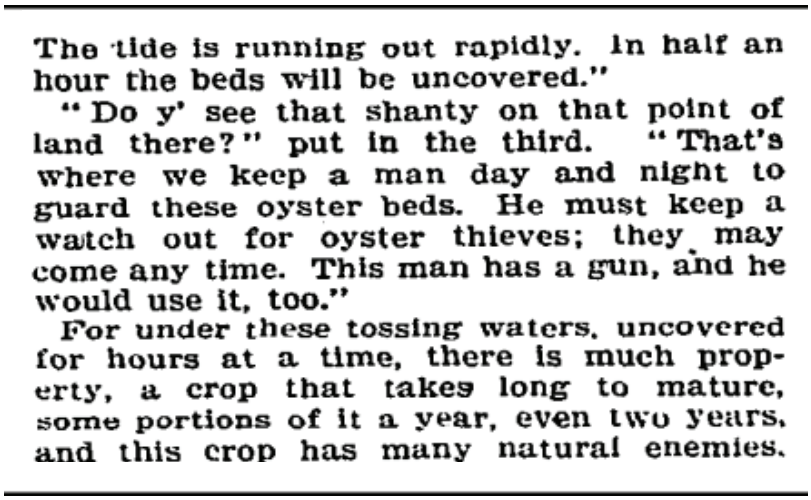
Recreational Versus Commercial Fishing

For the Jamaica Bay estuary, the three or four decades of the Gilded Age saw the bay's fisheries (especially recreational fishing) thriving even while development of tourism and commercial recreation soared on Rockaway Peninsula as rail service im-

proved.

> But public opinion had long favored the recreational anglers. The previous summer an unidentified party of "some Rockaway Boys" raided the commercial fishing camps and burned several hundred yards of nets. (Fishing in Jamaica Bay, NYT, June 23, 1890 page 8) In March while the bill was first being debated over 15,000 signatures supporting it had been collected from Rockaway Beach and nearby communities. It was estimated that the value of the hotels, boat liveries, tackle shops, and other infrastructure supporting recreational fishing exceeded $200,000. (Jamaica Bay Fishermen, NYT, March 12, 1890, page 1) A local banker at Far Rockaway was known as a supporter of the commercial fishermen but changed his views after depositors began withdrawing their funds in protest. (Fishing in Jamaica Bay, NYT, June 23, 1890, page 8.) Observers noted that the fishing in the bay had improved since the net law went into effect. (It makes the Seine Men Angry, NYT, July 28, 1890 page 8)

In truth, urban development was severely underming the bay's ecosystems. "In 1904, Jamaica Bay was the largest single source of oysters in New York State. The oyster beds of Jamaica Bay were leased by the state. The bay produced between 500,000 and 1,000,000 bushels annually. "(Ollsen 2010; Stiles, George, W., Sewage Polluted Oysters as a Cause of Typhoid and Other Gastrointestinal Disturbances, US Dept of Agriculture, Bureau of Chemistry - Bulletin Number 156, Washington, Government Printing Office, 1912.) As population pressures increased along the bay shores of South Shore Long island, tensions also increased for people in the oyster fishery, as the accompanying expert from a New York Times article at the turn of the Century:

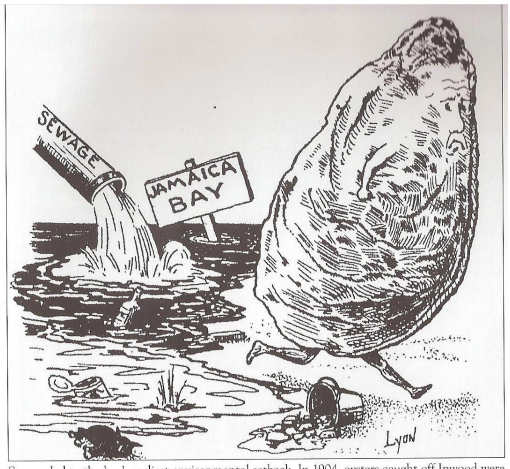


The tide is running out rapidly. In half an hour the beds will be uncovered."

"Do y' see that shanty on that point of land there?" put in the third. "That's where we keep a man day and night to guard these oyster beds. He must keep a watch out for oyster thieves; they may come any time. This man has a gun, and he would use it, too."

For under these tossing waters, uncovered for hours at a time, there is much property, a crop that takes long to mature, some portions of it a year, even two years, and this crop has many natural enemies.

Image 2.3: How the Oyster "De Luxe" is Gathered (New York Times, December 25, 1898)



Sewage led to the bay's earliest environmental setback. In 1904, oysters caught off Inwood were linked to 21 cases of typhoid, followed 11 years later by another 27 cases from Canarsie oysters. By 1917, when this illustration was published, 50 million gallons of sewage flowed into the bay each day. Health officials closed the shellfish beds in 1921, and the practice remains banned to this day. (Courtesy Queens Magazine.)

Image 2.4: Jamaica Bay Comic (Hendrick 2006)

Untreated sewage from Flatbush was piped down into the bay, as was sewage runoff from homes in the Rockaways. Oyster beds became visibly polluted; lawsuits and outbreaks of typhus and other illnesses followed soon after. The state officially closed the entire bay for oyster harvesting in 1921 and ended its history as a legendary producer of shellfish. The next historical period of changes along the Bay's shores would impose a strong governmental hand on development of the regional infrastructure that would also encourage even more rapid urbanization of the communities nestled in its creeks and former meadows.

1920-1972: The Moses Era: Legacies of Industrialization and Protection

Proposals to transform Jamaica Bay into a major Atlantic coast port facility by the U.S. Army Corps of Engineers had been developed at the end of the 19th century. In the 1920s, however, a number of ambitious development projects began to alter the physical characteristics of the Bay. Parks Commissioner Robert Moses and his allies in city and state government pushed ahead plans to fill in Barren Island for the construction of Floyd Bennett Field, and to channel and fill creeks and marshes along the Bay's northern perimeter for the creation of the Belt Parkway and the Marine Park Bridge. These were merely a few of hundreds of such projects throughout the metropolitan region that used landfill, household garbage, construction wastes, and dredging spoils, to create airports, prisons (Rikers Island in particular, parkways, and much more. Nor is the near craze for filling wetlands to create urban parks and related uses unique to this

period of the city's history. Benjamin Miller's indispensible history of the uses and politics of urban garbage over the past two hundred years of New York's history, Fat of the Land (Miller, 2000), notes that in the late nineteenth century Olmsted himself had used over a hundred thousand cubic yards of refuse to fill in land along the Hudson to build Riverside Park. In Jamaica Bay, excitement about building for the "Air Age," would overcome any local or wider protests over destruction of wetland resources or the eviction of powerless local residents on Barren Island . Miller writes that:

> After Pearl Harbor, parkways were no longer a national priority. The War Production Board wanted airports, however, as much as Mayor LaGuardia did. Following the money trail, as always, Moses began to expand Floyd Bennett Field on Barren Island with more refuse so that it could be sold to the Navy. With the proceeds, he bought (marsh)land to build a new airport at the opposite end of Jamaica Bay, then filled it too with garbage. While he was at it, he added more refuse fill to the Marine Park adjacent to Barren Island and began planning landfill parks near the new Idlewild Airport.
> (Miller 2000, p.204)

Floyd Bennett eventually lost out in the competition between Newark and LaGuardia airports, remaining a military facility until it was eventually ceded to the Park Service with the Creation of Gateway N.R.A.. The Robert Moses period of large scale landfill and extensive urban development in and around the Bay helped create many of the social and cultural characteristics of the Bay communities that persist into the present.

The Legacy of Community Solidarity and Defended Neighborhoods

Residents of the Rockaways and other communities along the Bay's edges experienced evictions due to the Moses plans that are still the subject of much local resentment. They also developed, as we shall see presently for some of the neighborhoods, intense local loyalties and high levels of commitment to public service, especially in the uniformed services. This was partly the result of experiences of the World Wars where generations served their country with pride and sacrifice. But there was also a more critical, proactive influence among residents of Bay communities who were being evicted from fishing shacks and more substantial homes around the Bay's islands as public works and residential development increased. Memories of the evictions help sustain continuing feelings of distrust of government authorities (see the cover photo of a popular pictorial history of Jamaica Bay below) So do memories of "urban renewal" which

resulted in the razing of many blocks of Rockaway's beloved bungalows. In the minority neighborhoods on the eastern Rockaways, however, African Americans also sustained sporadic opposition to Moses's many relocation efforts. Much more about this history and its living influences is available in Between Ocean and City: The Transformation of Rockaway,New York neighborhoods of the Rockaways (Kaplan and Kaplan 2003).

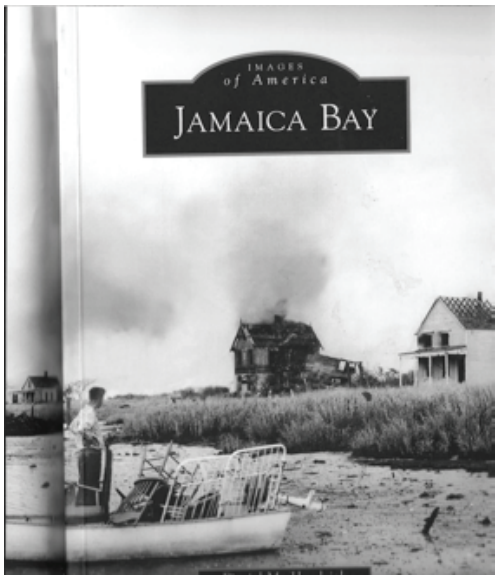


Image 2.5. "With his belongings in tow, a man watches as homes on Ruffle Bar are burned. Parks commissioner Robert Moses ordered several islands evacuated in the early 1950s to create the park now known as the Jamaica Bay Wildlife Refuge. (Courtesy Ed Clarity and Dan Mundy)" This haunting photo is on the cover of an excellent collection of historical photos in widespread circulation, especially locally. (Jamaica Bay, Images of America Series, Daniel M. Hendrick, 2006)

In Canarsie, Bergen Basin, Gerritsen Beach, and Howard Beach, as in the neighborhoods of the eastern Rockaways during this period, the incorporation of what had once been relatively isolated and fiercely independent "villages" into the controlling institutions of the larger city often caused conflict with authorities. In 1934, for example, there was a rancorous dispute between volunteer fire fighters and their families in Gerritsen Beach with officials of the New York City Fire Department. The latter had seized the volunteer's equipment in an effort to impose their procedures and rules. (http://www.gerritsenmemories.com/hist_stor/vollies062934.htm).

As newcomers began purchasing property in homes in the Bay communities, the fear of policies that would bring new populations, and racial minorities in particular, into the area, furthered a commonly held opinion that local institutions and ways of life needed to be defended against a variety of external threats. As the minority populations of Central Brooklyn and East New York expanded into the white neighborhoods

to the south, racial tensions in neighborhoods along the Belt Parkway and those along Woodhaven Boulevard also increased over the period. The history of racial tensions in the bay communities is often traced to notorious incidents in Howard Beach and Broad Channel that occurred in the 1970s, but traditions of neighborhood defense that would help explain these events were established decades earlier. Nor were perceived threats to local neighborhood cohesion limited to the Irish and Italian American enclaves along the Bay. Jonathan Reider's historical and ethnographic study, Canarsie: The Jews and Italians of Brooklyn against liberalism (1987) is a celebrated account of , among other subjects, the Jewish congregations of Canarsie reactions to the growing presence of non-white residents in their neighborhoods. David Frum's review of the book shows how relevant the study of Canarsie, a local Jamaica Bay community, was to interpretations of national politics at the time:

> . . . anthropologist Jonathan Rieder spent two years living not in New Guinea or up the Amazon but in a place that his academic colleagues probably found even more exotic: the lower-middle-class neighborhood adjacent to New York's Kennedy Airport. There Rieder witnessed close-up the destruction of Roosevelt's coalition by voter revulsion against crime, welfare and casual disorder.
> (David Frum *Wall Street Journal*, quoted at http://www.amazon.com/Canarsie-Italians-Brooklyn-Against-Liberalism/dp/0674093615/ref=sr_1_2?ie=UTF8&s=books&qid=1289665989&sr=1-2)

The eviction in 1936 of the entire community on Barren Island is an earlier but singular Jamaica Bay episode of the Moses era. This chapter of Jamaica Bay's history remains relatively under-explored in the literature yet is an important instance in which the community in question was racially and ethnically integrated where regardless of race or creed, everyone experienced the equality of poverty. From this perspective alone, it would seem to stand with the removal of Irish and African American settlers of Seneca Village for the construction of Central Park, as another example of removal of the powerless to create valuable public places (http://www.learn.columbia.edu/seneca_village/).

The story of the Barren Island community also introduces Miss Jane Shaw, a principal and the only teacher of the island's school children for nineteen years, A vocal yet almost saintly heroine of the Bay and the city's poor, she remains largely unknown. This is perhaps because to understand her importance is to visit, at least in the imagination, one of the more hellish places of the city's industrial underbelly.

Image 2.6: Barreling Barren Island Oil

For much of the nineteenth century Barren Island was the city's offal depot and grease factory. A source of enormous profits for its operators and their political allies, it was also the malodorous home to an impoverished population of African-Americans, Irish, Italian, and Polish men women and children. Children picked over mountains of garbage while their parents labored in the try works. With a population close to fifteen hundred during its peak years during the twenties and early thirties, historian Benjamin Miller writes that "None of the physical details of the manufactories or of the materials they processes were unique, but in their aggregate, they may well have made on Barren Island, the largest, most odorous accumulation of offal, garbage, and alienated labor in the history of the world."

> During the heyday of the fish oil, fertilizer and refuse disposal industries, a modest volume of ship traffic focused on Barren Island. The garbage and horse rendering establishments depended on the daily arrivals of scows from New York. From early May to mid-November, the menhaden season, thirty steamers moved back and forth between the bunker fish schools in the Atlantic and the fish oil plants on the island. Other vessels carried away fertilizers, fish oil and other products. Beginning in 1906, the island was a stop on two ferry routes, one originating at Canarsie and terminating at Rockaway Beach and the other running from Sheepshead Bay to Rockaway Point.
> (Black, 1981, p.30)

By the time Robert Moses was exerting his power over Jamaica Bay, the popula-

tion on Barren island had become predominantly composed of households with couples and children, rather than single men (Black 1981). A former resident of Barren Island remembered the community and its one-room school as its history was coming to an end:

> Robert Moses, moved the people out of Barren Island. What he did was move only half of them out. We lived at 49 Main Street which was about the eviction line, and we moved farther east to #3 Main Street. So between 1936 and 1939 there were about 30 families still on Barren Island. Our school --P.S.120 (I remember 2 teachers, the principal, Miss Shaw, and another teacher named Miss Contillo) -- was torn down in or about 1936 when the west half of the island was evicted. Our church was left and used by the remaining people. After P.S. 120 was torn down we had to walk to Flatbush Ave to catch the bus that took us to P.S. 207 or 208.
> (Cited in Boyle, 2010 from citynoise.org, 10th Aug 2007)

Miss Shaw made sure that all her children received real educations, and when Robert Moses announced that the community would be razed to allow for the marine Park Bridge approaches, "she fought to buy enough time for her charges to finish the school year; despite the odds of going against the famously ruthless parks commissioner, she succeeded. "(Miller, 2000, p.88) This was perhaps the first instance of community-level protest and citizen activism in Jamaica Bay, but it would hardly be the last.

The Legacy of Jamaica Bay as a Cherished Fishery

Even as so many marshes and creeks of the Bay were being lined by rip rap or seawalls, or dumped on and filled to create Floyd Bennett Field, the Belt Parkway, and Idlewild/JFK airport, for example, a lively recreational fishing industry continued to sustain hundreds of households in and around the Bay during the decades of the Moses era. This was not true, as noted earlier, of commercial fishing, and especially of shell-fishing. Moses did take the lead in constructing treatment facilities that would reduce the direct inflow of fecal bacteria into the Bay. Unfortunately, he and his planners were instrumental in building the four major treatment plants along the shores of Jamaica Bay that continue to load the estuary with more nitrogen from treated waste than it's eco-systems can adequately assimilate, a situation to which we must return elsewhere in this report.(Jamaica Bay Task Force Report, 2008). In consequence, the commercial shell-fishing industry has never become re-established in the Bay, but recreational fishing has continued to be a passionate pursuit for people growing up along the creeks and chan-nels in many of the Bay neighborhoods. The recreational fishing industry, and family

boating in the Bay and nearby waters, continue to be vital aspects of the Bay's particular culture. There are endless examples of this fact available in the blogs that appear on the Web. The following example captures the way those who operate recreational fishing business contribute to the remarkable attachments non-residents of the area can form to the Bay's natural resources. Even extremely limited experiences on the Bay, like the one offered here, remain alive in vivid adult memories of fishing and poking around in the mud flats at Broad Channel and other original Bay settlements.

> I grew up in the northeast corner of New Jersey, and my maternal grandparents lived in Glendale, Queens. I have a vivid memory of a special weekend I spent with my grandparents (without my parents or sisters!) when I was about 8 (late 1950s). We went to Broad Channel for the day, and my grandfather took me clamming. We had to wear sneakers, but when we felt a clam underfoot, I would duck underwater to grab it. We took home the clams we found, and my grandfather opened them at the kitchen sink. Mostly my grandmother sat on some wooden steps leading down to the water as I jumped around and paddled in the water. I remember thinking it was strange seeing her in a bathing suit. Thinking back now, it looked like an old, rather run-down dock, but it lives in my mind as a wonderful, bright summer day.
> www.nypl.org/blog/author/33

Image 2.7 Broad Channel
New York Public Library

The Legacy of Private and Public Housing Neighborhoods Around the Bay

Jamaica Bay is ringed by marshlands, landfills, parkways, airports, and, in many places, publically subsidized housing projects. Starret City just north of Gateway's Pennsylvania Avenue landfill is a middle income project, while Hammels and Arvern homes

on the Rockaways, are venerable New York City Housing Authority neighborhoods, which, along with housing projects in Canarsie and many other Watershed neighborhoods, are also a legacy of the Moses era. They are at once a vital source of affordable housing in the city, and a continuing source of inter-racial tensions and misunderstandings. Often associated with "public welfare" and thus attacked by enemies of public sector investment, their emergence as a response to housing emergencies before and especially after World War II is often forgotten.

Image 2.8 Quonset Hut

The twenty year period from 1940 -1960 brought extremely rapid housing development to the communities along Jamaica Bay. Housing developers like William Howard, after whom the Howard Beach community is named, established precedents early in the Twentieth Century for later residential growth, and in some cases, as in that of the old Ramblersville neighborhood of Howard Beach, the location of rail stations significantly supported housing growth well before the two World Wars. The Second World War and the sudden de-mobilization of thousands of military personnel after 1945 created emergency housing shortages. Queens and Long Island went through an historic suburban building boom. At Howard Beach the pressure for development led the marshland west of Cross Bay Blvd to be filled in. New private homes were built on 50 and 60 x 100 lots in the neighborhood that came to be known as New Howard Beach. A bit later, in the 1950s, vacant land north of New Howard Beach became the site of new housing, including red-bricked two-story garden style cooperative apartments, and a few six-story co-op and condo apartment buildings. This pattern of investment by developers in tracts of single-family homes or garden apartments was ubiquitous in the Watershed region. In Canarsie and the Rockaways, however, the housing emergency was more typically addressed by the building of temporary housing for returning service personnel and their families, and by the acceleration of plans, most often put in place

by Commissioner Robert Mose s, to replace those structures with permanent public housing apartments. For the Bay's communities, the most famous example of this post-war housing emergency is the Quonset hut settlement in Canarsie (photo taken from NYCHA Journal Spring 2009). As this recent on-line comment in the Canarsie Courier indicates, local residents remain fascinated by this period of rapid growth and change in their communities.

Image 2.9 Assemblyman Alan Maisel was kind enough to loan us this photo of Canarsie, circa 1953. Of particular note is the pier itself, which, at the time, was referred to as "Play Pier." Note the area to the north of the pier - where BayView Houses is currently located - and you will see quonset huts that were installed as emergency housing units for U.S. Army servicemen and their families as they returned from fighting in World War II. The huts were being torn down as families found more permanent housing all over the city. Canarsie itself also experienced a building boom at the time, with elements of Seaview Village quickly being filled with new housing. (http://www.canarsiecourier.com/news/2006-07-13/OtherNews/040.html)

A Legacy of Strong Religous Congregations

During the Post War building boom in Southern Queens and Brooklyn, new churches and synagogues were organized by parishioners in Canarsie, the neighborhoods of Mill Basin, Howard Beach and other rapidly growing neighborhoods within the Watershed area. Newcomers also expanded the ranks of longstanding congregations in the region. The congregational religious ecology of the watershed – largely composed of Roman Chatholic, Protestant (especially African American and West Indian churches) and Jewish, reached its peak during the 1940s and 50s, and was largely intact when Gateway was created. (That ecology is changing rapidly at present, as we will see in further detail in Chapter 5)

The oldest standing churches in Queens and Brooklyn are the early Dutch Reformed churches and the Quaker Meeting house in Flushing, Queens, the oldest con-

tinuously operating church in New York City. The Rockaways also host a number of the Old Dutch Reformed and earlier Presbyterian churches, like the First Presbyterian Church, built originally by the widow of railroad magnate, Russell Sage, now on the national historic register. But some of the most venerable Roman Catholic congregations, as opposed to church buildings, are found on the Rockaways. St. Mary Star of the Sea, was established there in 1855, and its current church dates back to the early 1920s. The St. Rose of Lima congregation was founded in 1870. The congregations of Breezy Point that form today's Blessed Trinity Parish -- the Churches of St. Genevieve, St. Thomas More & St. Edmund in Roxbury, Rockaway Point, and Breezy Point – are historically integral to their pre-war neighborhoods. The St Francis De Sales congregation in Belle Harbor dates to the turn of the twentieth century and remains one of the largest and most active of the watershed's many Roman Catholic churches. It was the emotional and spiritual center on the Rockaways during the disasters of 9/11 and the crash in Belle Harbor of Flight 587 two months later (see more on the influence of these events on local culture below).

Post War Canarsie came to be known as a community with a large Jewish population. The Jewish population of Canarsie, and other enclaves along the northern shores of Jamaica Bay, began to grow rapidly during the 1920's, along with the Italian population. In Canarsie most Italian –Americans went to mass at the Holy Family Church,. Within a few years of accelerating Jewish settlement, the congregations of three temples experienced rapid growth: Ahavas Achim Anshe Canarsie (originally established in 1908) on Glenwood Road and East 95th Street, the Kevelson Synagogue on Avenue L and East 96th Street, and the A.A.A. Sfard on East 94th. By the 1970s there were at least five more Jewish synagogues (Reider 1987; http://www.oldcanarsie.com/religious_buildings.htm) . In Howard Beach, as in the Rockaways, Jewish and Roman Catholic houses of worship were the most rapidly growing congregations during the Post World War II period and up to the early 1970s.

African American and West Indian populations of central Brooklyn and the Jamaica Queens were experiencing rapid growth of their home-owning middle classes during the Post War period. They were also joining white families in moving into the hundreds of NYCHA apartments in Canarsie and the Rockaways, where they tended to form small congregations with local pastors, sometimes in store-front churches, sometimes joining older white congregations (as in the Rockway First Presbyterian Church).

Some Churches like the Allen A.M.E. Church of Jamaica were building larger congregations. By the mid-seventies the Allen Church had recruited a new leader who would become one of the nation's pioneers in forming the mega-church movement. The Pastor, Reverend Floyd Flake built the Allen Church into a congregation that attracts members from a number of Jamaica Bay communities with African American and West Indian populations, including Far Rockaway, Innwood, and Jamaica. The church, now the Greater Allen A.M.E. Cathedral of New York in Jamaica,. Queens claims over 20,000 members and is active in a variety of commercial development efforts in the communities it serves. Reverend Flake also became a major political force in the Watershed area while he represented voters in the 100the Congressional District, which includes numerous Watershed communities from Woodhaven around the airport, and Jamaica out to the Nassau County border. Reverend Flake joined Congresswoman Shirley Chisholm (who represented Central Brooklyn communities in Congress from 1969-1982) as influential representatives from the Watershed area during Gateway's early years. Rep. Chisholm's background was more secular that Rep. Flake, but like him her base of support came from many staunch church goers in the neighborhoods she served.

A Legacy of Environmental Action and Wetland Protection

In his monumental study of Moses' long career, historian Robert Caro is careful to establish that the "Power Broker" was never motivated by urban development as a single and sovereign mission (Caro, 1974). While he was devoted to automobility and to the construction of parkways that would bring the middle class masses to his new park and beach destinations, he was also a believer in environmental preservation. Jones Beach State Park, his first and most acclaimed public work, also gave him the opportunity to take a major role in preserving the interior wetlands of Hempstead Bay in Suffolk and Nassau county. He soon applied this model of combined development and preservation to his plans for parkway and park development in and around Jamaica Bay. Marine Park, Riis Park, the Beach Channel Drive, the Shore (or Belt) Parkway, and the Marine Park Bridge create the contemporary human ecology of Jamaica Bay.

Mayor Wagner eased Robert Moses out of power in 1960, but he never shied away from controversy about the bays and beaches of Long island. Strenuously opposed to the transfer of so much of his former Jamaica Bay empire to federal ownership and management, he said publically on many occasions that he did not think the Park Service could manage urban parks or deal well with city people and their politics. This was

partially a reprise of a position he had taken when he unsuccessfully opposed the creation of Fire Island National Seashore a decade earlier. An irony that borders on the tautological is that Gateway, a visionary national recreation area in the marshes under the incoming jumbo jets, would not exist without the park and transportation infrastructure Moses had created in Jamaica Bay and the Rockaways by the early 1970s.

In his 1969 Pulitzer Prize winning book, So Human An Animal, internationally acclaimed microbiologist Rene Dubos brought Jamaica Bay to early prominence among environmental activists. His book helped mobilize the political support that eventually produced Gateway's enabling legislation. In a 1970 interview Dubos summarized his perception of the Bay during the last years of the Moses era:

> I think the Jamaica Bay adventure—and it is an adventure—is probably the most complete and unexpected success story of the whole ecological movement in the United States at the present time. That is the reason why I've taken such a strong position on it. Jamaica Bay was used for many years—perhaps fifty, I'm not certain—as a dumping ground for New York City. It was a gigantic dump. The bay is about one-half covered by the garbage of New York City. That sounds awful, and it is. There is no doubt that it has completely spoiled the waters of the bay. It is one of the most polluted environments in New York City. Progressively, the junk . . . the garbage, settled down and formed a series of islands in the bay. Artificial islands completely made by garbage.
>
> Then there was an employee of the Park Department: A new man named Herbert Johnson took the position and decided that something should be done about that area. Instead of just doing only what he was supposed to do, he took it upon himself to collect seeds of different kinds of plants and trees: Pines, bayberries and all sorts of vegetation. He actually planted the seeds with his own hands. He planted the trees, the bayberries, the grasses. And soon, what was once just a dump has become a tremendous, collection of different plants which are growing successfully in the bay area. Once the plants began to grow, they attracted birds. All kinds of birds. Tremendous flocks returned to the area. And not just ordinary birds like ducks, but also many birds—such as the Snowy Egret—which had disappeared from the New York region.
>
> So there we are with a situation that appeared to be one of the worst examples of degradation of the environment in a large city. Through the persistence and initiative of a state employee a miracle has occurred: The creation of a beautiful, ecologically interesting and—apparently—very vigorous bird sanctuary.
>
> (Allen Richards - November/December 1970,)
> http://www.motherearthnews.com/Nature-Community/1970-11-01/The-Plowboy-Interview.aspx?page=2

It is true that the wildlife Refuge was created as a physical place with extremely

well planned habitats through the inspired work of Herbert Johnson, a park maintenance foreman who was also an avid birder. But Mr. Johnson worked for Robert Moses and historians accept the fact that Moses himself was responsible for directing that the refuge be built. That decision has never placed Moses in the pantheon of environmental pioneers, his legacies are far too ambiguous for that, but in this period, and, largely thanks to Moses environmental concerns, Jamaica Bay became a national symbol of environmental restoration. On the other hand, his hauteur and unbridled disdain for places like Broad Channel are evident in this passage from his 1938 report to the Mayor, The Future of Jamaica Bay.

> Its wide skies, its long water reaches and low, grassy and mysterious-seeming islands make Cross Bay Boulevard (despite the shacks and hot dog stands which already too much disfigure it) as an avenue into a strange corner of primitive romance of a kind one would hardly expect to come upon between Ozone Park and the Rockaways. (quoted in Kaplan and Kaplan 2003, p.79)

The Legacy of Citizen Activism

There is a direct line of Jamaica Bay citizen activists that runs steadily through the Twentieth Centuryt and into the present – from Jane Shaw of Barren Island to Herb Johnson of the Refuge, to Sam Holmes and Tom Fox of the community gardens on Floyd Bennett Field, to the Mundys of Broad Channel, and to the many activists citizen groups, like the Rockaway Waterfront Alliance (http://rwalliance.org/about/), working to improve access to the Bay's waterfront and its natural resources. The list must also include people who never lived along the bay but who devoted large blocks of time to working as Gateway Citizens under the leadership of Marian Heiskell first Chairman of the Gateway Citizens Committee and the Gateway Advisory Board, and Kim Norton, Stanley Tankell, and Sheldon Pollock of the Regional Plan Association, all of whom were instrumental in Gateway's creation. Citizen involvement in the Park's development may have waned after federal management became well established, but as the park continued to host increasing numbers of environmentally concerned visitor groups, its profile as a conservation presence in the Watershed area increased, especially in the critical activates of local community boards and innumerable civic voluntary associations in the bay communities. We will see presently that the transition from citizen involvement to stakeholder presence on formal oversight committees represents one of the most important changes in Gateway's social and political environment since park creation in the

early seventies.

These legacies of citizen activism, environmental protection, intense solidarities of community, neighborhood and congregation, and the deep attachment to the bay's aquatic resources among generations of Jamaica Bay families, were important aspects of the local culture that presented itself to federal managers and park planners when Gateway was being created in the early 1970s as one of the nation's first two urban units of the National Park Service (the other being San Francisco's Gold Gate National Recreation Area). Even a brief review of the history of the Bay communities since the early seventies suggests that much of what has occurred since 1973 is strongly influenced by these living legacies of earlier periods of Jamaica Bay settlement.

From Gateway into the New Century: Cultural Groups and Jamaica Bay Resources

When considering the most significant events over the past forty years of Gateway's existence, especially those that have influenced life in and around the Bay, local historians, journalists, and social scientists point to these changes in particular:

- The drug epidemic and urban blight of the 1980s
- The terrorist bombing of 9/11 and its impact on Jamaica Bay communities
- Rapid population change, especially the large scale in-migration of immigrant households

The crack/cocaine epidemic of the 1980s heightened existing tensions between whites and non-whites in the Bay communities as levels of inter-personal violence increased along with fears and distrust of outsiders. This difficult period of the city's history (also coinciding with the AIDS epidemic) was experienced in particularly acute fashion in more economically impoverished of the Watershed region. Some communities lost large segments of their middle class populations, and as we shall see in the more detailed demongraphic analysis of change in the communities, this was particularly true in Bedford Stuyvesant, Brownsville and Ocean Hill, as well as in parts of the Rockaways and South Jamaica. This was also a period of sustained "white flight" from neighborhoods like Canarsie, and Arverne on the Rockaways, and others perceived as dangerous or potentially unstable, to more suburban places on Long Island (often along the South Shore of Long Island) As the influx of new immigrant groups into the region accelerated

through the period, it is not surprising that many of the housing vacancies in the Watershed region's neighborhoods were being filled by families of immigrant origins (see especially Chapter 3 of this report).

9/11 and Airline Disaster in the Rockaway Local Culture

No events have had more immediate and continuing impact on the communities and ways of life in and around Jamaica Bay than the terrorist attack on the World Trade Towers and the crash on Rockaway Peninsula in Belle Harbor of American Airlines Flight 587. As Melanie P. Hildebrant writes of 9/11 in her study of "double trauma in Belle Harbor" (Hildebrant 2005):

> On that day residents stood along the seawall facing Jamaica Bay, watching helplessly as the twin towers burned in the distance. Off-duty firefighters from Rockaway grabbed their gear, said good-bye to their children, and rushed to downtown Manhattan. By day's end, over seventy people from this remote seaside community in southern Queens had died in the terrorist attack on the World Trade Center. Among the dead were firefighters whose families had lived in Rockaway for generations. Others were employees of Cantor Fitzgerald, a financial services firm that lost nearly half its workforce; many of them lived in the Rockaway neighborhoods of Belle Harbor and Breezy Point
>
> The sound of church bells and bagpipes marked the days and weeks following the Sepember 11 attacks. Dozens of funerals and memorial services were held, many at the St. Francis de Sales Church, a Catholic church located in the de facto town center of Belle Harbor.

Two months later, while the community remained in a state of shocked mourning, American Airlines Flight 587, with 260 passengers bound for the Dominican Republic, crashed in Belle Harbor According to Hildebrant's interviews with Rockaway residents who experienced the events, many "would assert that the trauma of a plane nose diving into their backyards was worse." (Hildebrant, 2005, p. 107). All aboard the aircraft were killed, along with five residents of the neighborhood.

The details and the immediate experiences of people in Belle Harbor and surrounding neighborhoods before, during, and after both crashes are compiled by former Rockaway Wave reporter Kevin Boyle, in Breaking the Waves, Rockaway Rises... and Rises Again (Boyle, 2002). His gathering of recollections of the two disasters as they were felt and lived by people from the neighborhoods, and especially by members of the uniformed fire and police services, is both extremely moving and equally revealing of the strengths of family friendships and strong church affiliations that mark many of the neighborhoods around the Bay, not only those on the eastern Rockaway peninsula.

Boyle points out that the Rockaways are special in this regard: "There are more than 500 firefighters who live on the Rockaway peninsula, and hundreds more if you count retired guys. Rockaway also has a good number of police officers and emergency responders of all stripes. They've all got stories to tell – great, heroic, inspirational, hair-raising tales." (Boyle, 2002, p. ix). So do their wives and children.

> Maureen Edwards is at her kitchen sink, rinsing the bowls the kids used for their morning cereal. Something catches her eye out the window. She screams when she sees the fiery plane falling like a huge flaming arrow . . . diving . . . *where is it going to hit*?

Jamaica Bay neighborhoods along Bay are under the JFK flight paths. Had the wind been coming from another direction American Flight 587 could have come down in Howard Beach, or on the eastern border of the Bay, Innwood or Jamaica, as did Eastern Flight 66 on June 24, 1975. But the Airbus 3 bound for the Dominican Republic crashed into Belle Harbor where one of the neighbors who was at the crash site was Fire chief Pete Hayden, who only two months earlier had been in charge of the North Tower Command/ Operations Post:

> For the first time in weeks, Fire Chief Pete Hayden had a day off from leading the department's task force at the World Trade Center. ''I saw heavy smoke behind the left wing,'' Chief Hayden said. He watched the wing come off, then other sections, possibly the tail. ''She started to corkscrew, and then the last several hundred feet, she went straight down,'' he said. He ran nine short blocks to the crash, followed by dozens of other firefighters who live along the peninsula, heard the crash and went to work." JIM DWYER and JANNY SCOTT
> Published: November 13, 2001
> (http://query.nytimes.com/gst/fullpage.html?res=9500E5DF1138F930A25752C1A9679C8B63&sec=&spon=&pagewanted=all)

People anywhere in the world can hear Chief Hayden describe the Bell Harbor crash and watch documentary newscasts that bring the view into the burning streets of Belle Harbor after the crash (see for example, (http://www.youtube.com/watch?v=AFmVUok05E4). In the Rockaways and other Bay communities, the impact of the event is even more alive largely because of the losses and heroism neighbors experienced. Lingering health and compensation claims for first responders and issues of how to memorialize the two events remain open more than seven years later. As a consequence of the double trauma, the local culture of the Rockaways and other bay neighborhoods draws on an inexhaustible collective memory of tales from the two di-

sasters. Many are of personal tragedy, but others speak of resilience and defiance, as in the example of Michael Moran, brother of firefighter John Moran who perished at the Trade Towers. At a nationally televised concert and memorial, "John's younger brother and fellow firefighter, delivered to Osama bin Laden … a taunt so profane and yet so eloquent, full of Irish anger and grief. (http://www.irishtribute.com/tributes/view.adp@d=236920&t=238027&p=1.html).

When Flight 587 crashed in Belle Harbor it set off emergency responses throughout the metropolitan region. The Empire State Building was evacuated, all commercial flights were grounded, fighter jets were deployed over the city's airspace, authorities rushed to determine if the event was another terrorist attack. In the Rockaways, "The crash of flight 587 was a dramatic confirmation of a long-standing concern among Rockaway residents. As one resident said, 'We've always known that it wasn't a matter of *if* a plane would crash in Rockaway, but *when*.'" (Hildebrandt, 2005, p.119). In the aftermath of two disasters, residents reported to ethnographer Hildebrandt that a number of local community organizations, especially the churches and the local newspaper, the Rockaway Wave, "helped fill the voids created by the two disasters." *The Wave*, for example, "offered families the chance to place a full or half-page ad, free of charge, in tribute to lost loved one. Several families tok advantage of this opportunity and were grateful to *The Wave* for making the space available"(Hildebrandt, 2005, p.122).

On the bay itself, the events of September and November 2003 have necessarily resulted in increased surveillance of boat traffic passing east of the Marine Park Bridge. Bayman Larry Seaman and his son found their fishing activities on the Bay suddenly under unprecedented suspicion as new buoys marked the edges of the airport, helicopters flew overhead, and Coast Guard vessels frequently stopped his vessel. "All of which is fine, the Seamans say, except for the fact that they are now in the absurd position of being treated as suspects by people with whom they have been on a first-name basis for years. 'It's not the regular guys,' Says Seaman Jr. 'It's the command structure; they're just so gun-shy about everything.'" (quoted in Gibberd, 2007, p.5). It is likely that New York State regulations on catch limits for commercial and recreational fishing, and mandatory salt water license regulations that began in 2010 have had more lasting impact on uses of Jamaica Bay for fishing and boating than have responses to terrorism, a subject to which we return in Chapter 4.

Heroic responses to terrorism in the Bay communities, and the experiences of

neighbors helping each other deal with trauma, have strengthened the solidarity and local cultures of the older neighborhoods along the bay's shores. At the same time, however, the continued arrival of new families above the Belt Parkway, but also into the neighborhoods at the water's edges, is bringing rapid change to the watershed's population and to the cultural uses that people make of Jamaica Bay resources.

In-Migration of Immigrant Groups to Watershed Communities

In the four decades since Gateway assumed responsibility for protecting the resources of Jamaica Bay, and also for making them accessible for recreational opportunities, the demographic composition of the Watershed's population has changed appreciably in all of the communities surrounding the Bay. In 1980, the White non-Hispanic population of the watershed constituted about 50% of its population. Today it is reduced to about one quarter of the total. Much of the loss has been made up for by increases in populations of West Indian, Caribbean, and Asian origins. The next chapter of this study provides more detailed analysis of these changes and their implications for the uses that new cultural groups are making of Jamaica Bay resources. These changes are traced at the level of the entire Watershed, and for individual communities of the region.

Assessment: Gateway's inheritance of cultural attachments in and around Jamaica Bay

An overview of the cultural history of Jamaica Bay Watershed communities shows that before it opened as a federal park in 1973, the resources in Jamaica Bay were already:

- A cherished recreational fishery, now diminished (see chapter 4)

- A diminished but active commercial fishery – eels, bait, crabs – now endangered at best, almost extinct except as a part-time occupation or a dream in many minds (see chapter 4).

- A lively family boating environment -- the waterways and natural areas hosted an active boating life independent of fishing. The boating uses of Jamaica Bay continue but are somewhat diminished by economic conditions and changing population characteristics (see chapter 4).

- Endowed with an active naturalist constituency -- the refuge and other sites along the Bay were the "habitat" for birders and other environmentally concerned citizens who formed an early and avid local constituency for environmental preservation and use. Gateway's resources are to varying degrees, and throughout its units, defined by groups who were on the property "using the resources"

before the park opened. Floyd Bennett was habitat for birders, for example, well before the park existed. The forested area on Floyd Bennett Field known as the North Forty was a term used primarily by birders and other naturalists. Their re-definition of the value of this wooded area became itself an element in the eventual defeat of aviation advocates, who were still active at Gateway's inception.

These are among the outstanding aspects of the social and cultural environment that Gateway inherited when it began managing its Jamaica Bay resources. But Gateway's management is necessarily influenced by the jurisdictions and policies of a myriad of agencies state, local, and federal. In this regard, a significant accomplishment the Park can claim is its leadership in coordinating the increasing knowledge base about the Bay's resources. Another is the National Park Service in Jamaica Bay has helped promote more coordination among responsible stakeholders in addressing Jamaica Bay resource issues. This is a subject to which we return in Chapter 5 as it relates to the cultural and community uses of park resources.

A Mosaic of Uses and Attachments

In 1976, during its extensive outreach to community groups and user groups, Gateway's NPS planning staff produced a film, narrated by Yankee-Hall-of-Fame shortstop, Phil Rizzuto, who was an early supporter of Gateway, especially on Staten Island. The film documented the very diverse array of park users it was serving even as it was establishing its management of the resources Congress had put under its management. Along with systematic analysis of park uses that were conducted at the time, the film documents park use throughout Jamaica Bay, from Plum Beach and Canarsie Pier to the Refuge and fishing spots on the bridges along Woodhaven Boulevard, to Riis Park and Beach Channel to Floyd Bennett Field (Kornblum et al, 1974). Since so much of the area had been surplus military property for two decades or more, there were many areas of the bay shore and wetlands that had become urban wilderness where junked and stolen cars and other waste was being illegally dumped. In the first two years of Gateway's operation of the Jamaica Bay Unit, about 400 automobile hulks were extracted from the wetlands on either side of the Belt Parkway. Today the park's bay and beach resources serve as a regular gathering place and temporary base of operation for an astoundingly wide range of formal and informal groups -- sports, cultural, recreational, who feel strong attachments to one or another of its resources. Many of these groups -- among them are model aviators, cricket teams, soccer players, campers, kayakers, community

gardeners, bikers, sailors, beach clubbers, pitch and put golfers, softball players, history buffs, birders and naturalists -- have longstanding relationships with Gateway and its resources in and around Jamaica Bay.

No matter what their particular sport or activity, people who spend precious discretionary free time pursuing a passion become intensely attached to the places associated with their efforts and rewards. If one sails out of the Barren Island Marina on Dead Horse Bay for a generation or more, for example, the docks and surrounding bay become "home waters," a safe haven in any weather. If one spends the waning years of youthful vigor perfecting a batting technique on Floyd Bennett Field's cricket pitch, that place becomes a fount of memories, as exemplified in Joseph O'Neill's best-selling novel Netherland , which for one reviewer " is at once an immigrant's imagined community, an emblem of foreignness, and, most poignantly, a dream of America" (Wood, 2008). But this conception of place attachment, based on associations with recreational passions, is elusive, especially since, as in cricket and other sports played on fields at Floyd Bennett, there are other venues where leagues convene, and it is the game and the connections formed on teams that form the deepest social attachments rather than the places themselves. One teams' home "field of dreams" is another's venue for an away game. Similar qualification applies to participants in ethnic festivals that have often taken place at Gateway.

Image 2.10 Pow Wow Festival at Floyd Bennett Field, Summer 2010 Photo Alex Rhea

Native Americans have been using Floyd Bennett Field every summer for nearly 15 years to host their POWWOW festival. The festival draws thousands of people, both participants and observers, from throughout North and South America. Vendors sell Native American crafts, such as silver jewelry and wooden bows, and authentic foods are available, e.g., buffalo burgers and venison stew. In addition to food and crafts, the festival serves as a site for music, dancing, and prayers and a place to reinforce their cultural traditions. Similarly, local Guyanese populations have hosted Curry Duck festivals at Floyd Bennett Field and at Jacob Riis Park. The Curry Duck festivals draw upwards of 30,000 to 40,000 people (Park permits allowed only 1500 people) from all over the country to eat, dance, and reconnect with old friends and old traditions. However, problems in the past with the size of the festival, parking, and garbage have led the Park Service to cancel the event in 2007 and 2009, to the chagrin of many in the Guyanese community. Despite the official cancellation of the event, many Guyanese continued to show up at Floyd Bennett Field to celebrate their ethnic heritage and reconnect with their homeland. This Guyanese connection to Gateway is also related to their uses of Jamaica Bay for religious ritual, as described at more length in Chapter 5.

That a Gateway resource like Floyd Bennett field has been used for ethnic festivals in the past is not evidence of longstanding and profound cultural attachment by the sponsoring groups to the resource itself. Nor is the fact that untold thousands of couples or individuals have stopped at the Plum Beach parking lot off the Belt Parkway for intimate purposes evidence that the specific site of their passions is particularly relevant or culturally significant. What matters most in these examples, is the convenience of the sites, rather than their historical and cultural meaning.

Floyd Bennett Field is also home to 300 acres of garden plots and nearly 600 community gardeners of diverse racial, ethnic, and socioeconomic status. Although this use of the resource does not pre-date Gateway's creation, it does pre-date the first General Management Plan and, in fact, inspired some of its emphasis on an ecological village at Floyd Bennett. The gardeners no doubt form extremely strong attachments to the plots and to the garden as an institution. A 1996 report "The Gateway Gardens: A Resource for a Diverse Urban Population at Gateway National Recreation Area in New York City," describes the importance of the Gateway Gardens as a cultural resource. Community gardeners have either recently come from, or else trace their origins to, a number of different countries throughout the world. Gardening allows people to recreate and recon-

nect with ethnic culinary traditions by cultivating foods that are important symbols of identity, family, and community. Food production provides an opportunity for people to reconnect with their homeland as well as important persons and memories from their past. In addition to cultural and ethnic traditions, gardeners also cite the importance of interacting with diverse populations, access to open space, and the opportunity to connect with nature and to develop gardening knowledge as valuable features of their gardening experience (Parish 1996). The diversity of the Gateway Gardeners is exactly the result one would hope for in extending access to these Gateway resources. But that same diversity argues against a cultural explanation for these attachments. Clearly some gardeners are motivated by the desire to grow the foods they associate with an ethnic culture, others want to grow food whose origins they know and trust, others wish to associate with other like-minded community gardeners in an effort to "green the city," while others may hold all of these values and others as well. In all cases, attachment to the garden plots by Gateway gardeners is deeply felt and deserves its own analysis as the Gateway planning process proceeds.

Cultural and Spiritual Connections to Gateway Resources

Groups and communities that have longstanding and profound cultural attachments to the resources Gateway manages in and around Jamaica Bay are particularly those who spend much of their lives out on the Bay or its wetland edges. The groups which can be considered among the "People of the Bay" for this ethnographic inventory, are those men and women who are out in the resource all the time- as a way of life. They also tend to raise their families in ways that are intimately connected to the Bay's resources and pass detailed information about the Bay and its ecosystems from one generation to the next. We will provide evidence in Chapter 4 of the various groups that constitute the "people of the bay," and show how changes in population and Gateway management alter their uses of the resources.

Groups (often convened as congregations) that have a religious attachment to the Bay's resources, including those of longstanding and those who are of more recent arrival, are the second main category of users of Gateway resources in an around Jamaica Bay which are further studied in this ethnographic survey (see Chapter 5). There is nothing as culturally significant in Jamaica Bay as the sacred Indian sites of the Black Hills or Canyon de Chelly, but culturally defined groups were making use of Jamaica Bay resources well before the Park was established. This is particularly true of Jewish

congregations who live within walking distance of the Bay and its ocean shores and who arrive to celebrate particular rituals associated with devout religious practices that occur on the Jewish High Holy days and on other religious occasions during the year. More recently there are representatives of newer immigrant groups, Hindu religious congregations in particular, and followers of various forms of Santeria and other derivations from Youroba religious practices. Since the disasters of 9/11 and November 12, 2003 in the Rockaways, there have also been increased uses of the ocean and bay beaches to commemorate these tragic events and to remember lost loved ones. We document these uses in greater detail and explain their origins in religious ritual more thoroughly in Chapter 5. National Park Service guidelines for conducting ethnographic inventories are outlined in Service management policies, such as the passage below, that define what the Service understands as "traditionally associated peoples:"

> Traditionally associated peoples generally differ as a group from other park visitors in that they typically assign significance to ethnographic resources— places closely linked with their own sense of purpose, existence as a community, and development as ethnically distinctive peoples. These places may be in urban or rural parks, and may support ceremonial activities or represent birthplaces of significant individuals, group origin sites, migration routes, or harvesting or collecting places. While these places have historic attributes that are of great importance to the group, they may not necessarily have a direct association with the reason the park was established, or be appropriate as a topic of general public interest.
> (NPS Management Policies 2006, Section 5.3.5.3)

The demographic analysis of changing populations in the communities around Jamaica Bay, which follows in the next chapter, also charts some of the ways demographic change has been affecting the religious and cultural institutions of the communities in which people have been traditionally associated with Park resources.

Chapter Three
Changing Demography of the Jamaica Bay Watershed

Immigration and population mobility have changed the communities surrounding Jamaica Bay in ways that were not anticipated when Gateway National Recreation Area was created by Congress in 1972. The effects of large-scale immigration into the New York and New Jersey metropolitan area have brought new cultural groups into the communities and neighborhoods, while geographic mobility and aging have diminished the populations of Irish, Italian, Jewish and African-American backgrounds in the communities and neighborhoods around Jamaica Bay. None of the quite dramatic demographic changes that are analyzed in this chapter significantly alter the mission of the National Park Service for Gateway's Jamaica Bay Unit. The goals of bringing National Park Service protection to the Bay's resources, while extending Park Service-quality recreation opportunities to urban populations, remain as cogent as ever, if not more so. As the population of the Jamaica Bay Watershed grows and changes, new cultural groups discover Jamaica Bay's resources and present new challenges for the Service at Gateway. In consequence, this chapter addresses questions about what population groups now live in the Jamaica Bay area, how these population have been changing since Gateway was created in the 1970s, and what cultural groups are making use of the resources of Jamaica Bay.

Overall Population Growth and Changes in Population Composition

Between 1970 and 2008, the Watershed area of Jamaica Bay gained an estimated 170,000 residents, an increase of only 9% in forty years. This increase, however, was superior to that of the city as a whole, which grew by only about 5% in the same period, one of the smallest increases in the nation Between 1990-2000 immigration largely accounted for the second greatest growth spike in U.S. population history (13.2%), second only to Post WWII Baby Boom. The Western states grew the fastest of any region, but all states gained population for the first time during 20th century. After 2001 there was a dramatic decrease in immigration into the U.S., which began to increase again later in the decade, as will be evident in figures aggregated from the Census for years 2006 to 2008. Today growth continues to be concentrated in urban areas and despite growth in non-coastal counties, 53% of Americans continue to live along the Pacific or Atlantic coastlines.

Since 2000, population growth in the United States has averaged 1 percent per year, or 10% per decade, with large regional variations. Average annual growth rates among regions have ranged from a low of 0.35 percent in the Great Lakes region to a high of 1.87 percent in the Southwest region. Among the states, growth ranged from a high of 3.41 percent in Nevada to a low of -0.05 percent in North Dakota.

Between 1970 and 1980 the Jamaica Bay watershed area lost over 7% of its total population. Table 1 indicates that the region did not return to or surpass its 1970 population totals until rapid population growth in the area occurred between 1990 and 2000. In that period the watershed's population expanded by almost 170,000 persons, an average of 1% each year for a total change of 10% in the decade. After 2000, and especially after 9/11, population growth in the watershed slowed to about 0.35 per year, or approximately 3.5% for the decade.

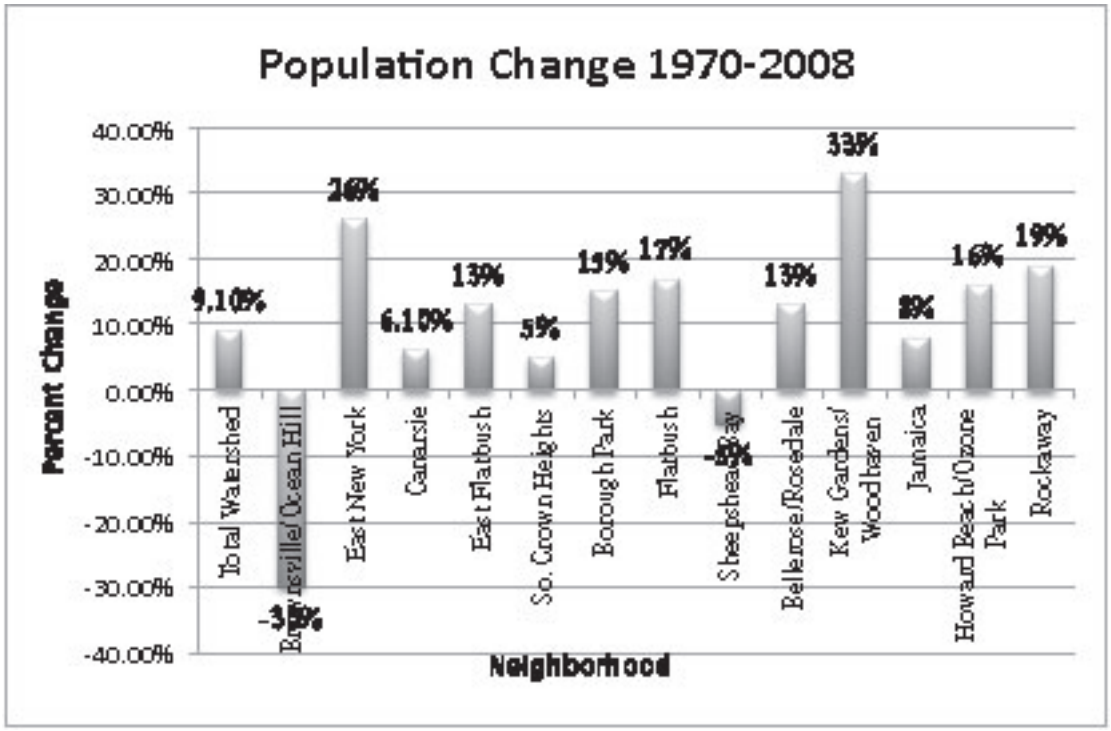
Table 3.1: Percent Native/Foreign Born for Jamaica Bay Watershed 1970-2008

	1970	1980	1990	2000	2008
Native Born	**84.0%**	**75.8%**	**68.4%**	**59.6%**	**58.6%**
	1,567,857	1,315,565	1,227,146	1,172,593	1,192,481
Foreign Born	**16.0%**	**24.2%**	**31.6%**	**40.4%**	**41.4%**
	298,868	419,895	566,463	795,232	843,717
Total Watershed Population	1,866,725	1,735,460	1,793,609	1,967,825	2,036,198

Source: 1970, Bureau of the Census Summary File, 4A; 1980 Bureau of the Census Summary File 3A; 1990 to 2000, Bureau of the Census Public Use Microdata Samples; 2006, 2007, 2008 American Community Surveys Combined File.

Examination of population decline and growth in the individual communities surrounding Jamaica Bay offers a more nuanced view of demographic change in he Watershed area since the 1970s. Figure 1 shows that two communities, Brownsville/Ocean Hill and Sheepshead Bay/Gravesend, actually lost population during the entire period. East New York and Kew Gardens/Woodhaven grew at rapid rates, which matched or exceeded national population growth for the period. The Rockaways, Howard Beach/ Ozone Park, Flatbush, and Borough Park grew at rates that surpassed growth rates for the city during the same period, but were far below national rates of growth for the entire period.

Figure 3.1 Jamaica Bay Watershed Population Change 1970-2008
Source: 1970, Bureau of the Census Summary File, 4A; 1980 Bureau of the Census Summary File 3A; 1990 to 2000, Bureau of the Census Public Use Microdata Samples; 2006, 2007, 2008 American Community Surveys Combined File.



Almost all the population growth in the Watershed region and within specific community areas is accounted for by the arrival of new population groups through direct addition of immigrants, or through the migration of immigrant groups from within the metropolitan region. Changes in the coding of race and ethnic identies in the U.S. Census between 1970 and 1980 make it inappropriate to include 1970 figures in the time series because categories provided in 1970 Summary File 4A were White, Negro and Other. Hispanics were identified in a separate question that asks if the respondent was Spanish Speaking. It is not possible; therefore, to separate race and Hispanic ethnicity as is possible for the 1980 Census and those since.

Table 3.2: Race/Ethnicity Jamaica Bay Watershed 1970-2008
Source: 1970, Bureau of the Census Summary File, 4A; 1980 Bureau of the Census Summary File 3A; 1990 to 2000, Bureau of the Census Public Use Microdata Samples; 2006, 2007, 2008 American Community Surveys Combined File.

Race/Ethnicity	1970	1980	1990	2000	2008
White, non-Hispanic	1,369,924[1]	**49.1%**	**37.3%**	**27.5%**	**26.5%**
		852,674	669,291	541,119	539,180
Black, non-Hispanic	433,587[1]	**36.9%**	**43.5%**	**44.9%**	**44.9%**
		640,682	780,714	883,091	914,767
Asian & Pacific Island, non-Hispanic		**2.2%**	**4.6%**	**7.0%**	**8.7%**
		37,734 [2]	83,134	137,896	177,547
Other, non-Hispanic	15,643[1]	**0.6%**	**0.5%**	**5.5%**	**3.4%**
		10,363	8,625	108,929	69,021
Latino	145,493[1]	11.5%	**14.0%**	**15.1%**	**16.5%**
		200,104	251,845	296,790	335,683
Total Watershed Population	1,866,725	1,735,460	1,793,609	1,967,825	2,036,198

1. Does not add to 100% because Hispanics can be of any race. Racial categories provided in 1970 Summary File 4A were White, Negro, and Other. Hispanics were identified in a separate question that asks if a person was Spanish speaking.
2. In 1980, the Asian and Pacific Islander category also included American Indians, Eskimos, etc.

Between 1980 and 2008, the latest year for which we have census estimates (based on the American Community Survey, U.S. Bureau of the Census), the White-Non-Hispanic population of the Jamaica Bay Watershed declined by over 313,000 persons, a decline of 37%. In the past thirty years it appears that the White non-Hispanic population of the watershed declined from almost 50% in 1980, to an estimated 26.5% in 2008. In the same period, as shown in Figure 2, the population of Hispanics increased from 11.4% to 16.5%, while Black, non-Hispanics increased their population proportion from 36.8% to 44.9%. And although they remain relatively small, at 8.7% in 2008, the Asian/Pacific, non-Hispanic population, and the East Asians (heavily represented in the Other, non-Hispanic category in Fig. 2) experienced the greatest proportional growth rates.

Figure 3.2 Race and Ethnicity Jamaica Bay Watershed 1980 & 2008
Source US Census 1980, 2008

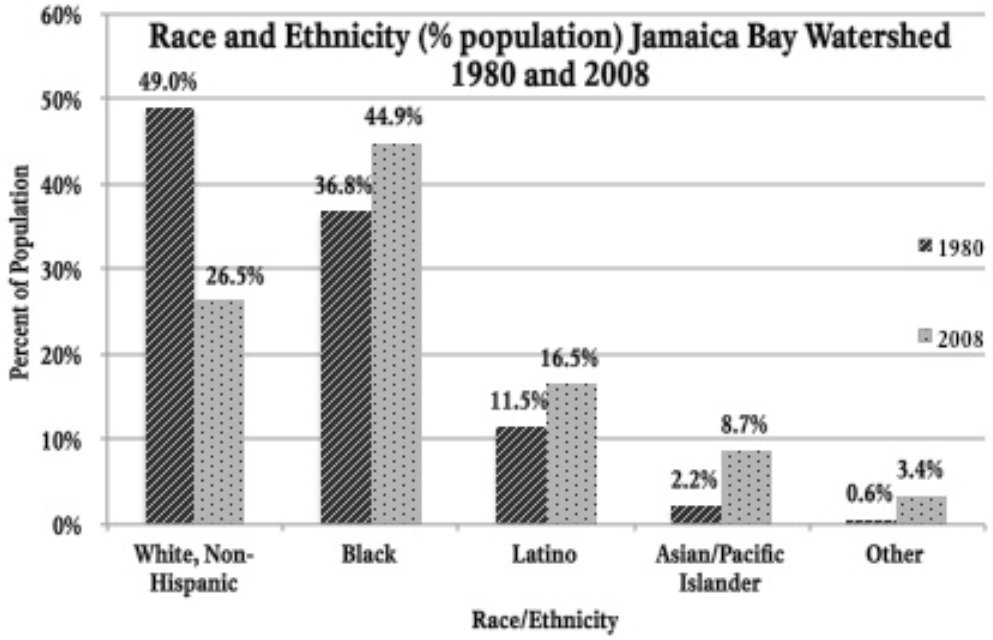


Figure 3.3 North East Racial Demographics 1990-2000 Source US Census

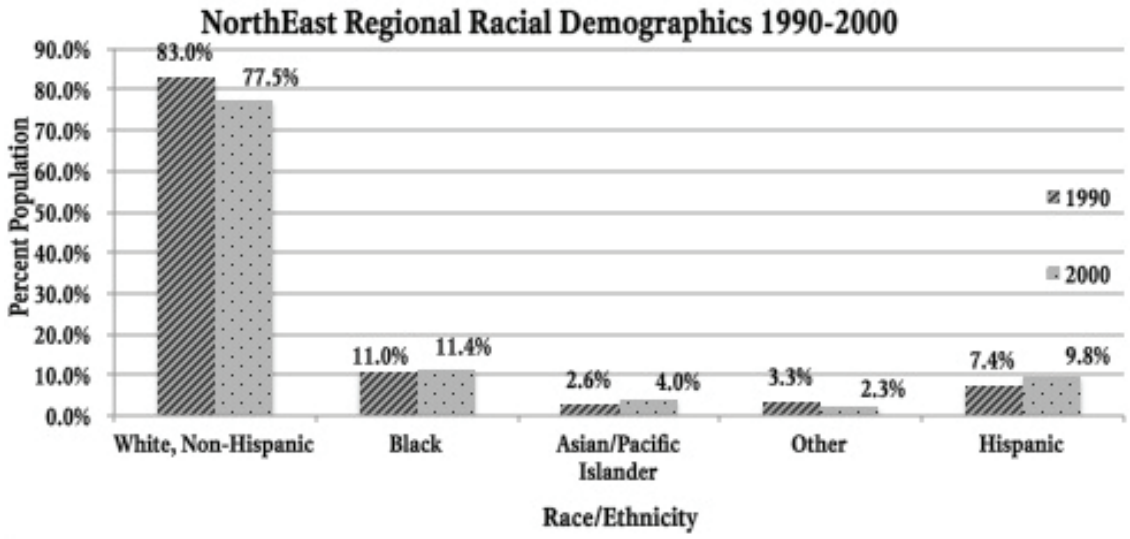


Figure 3.4 New York City Metropolitan Area Racial Demograhics 1990-2000 US Census

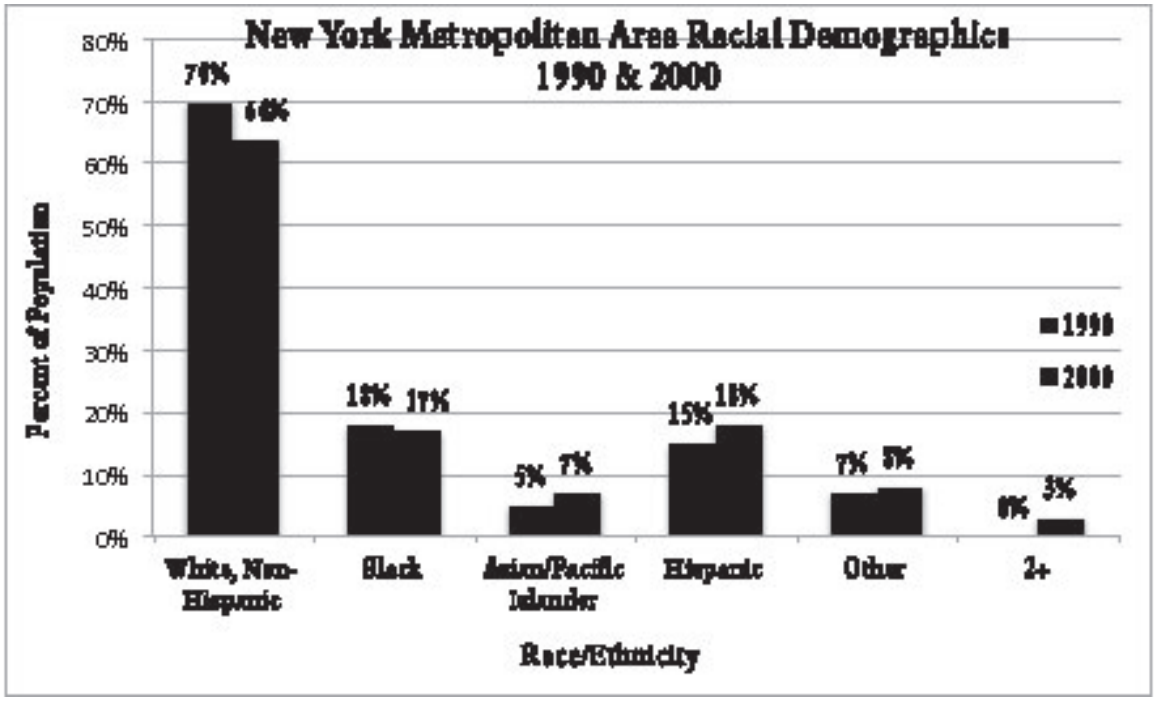
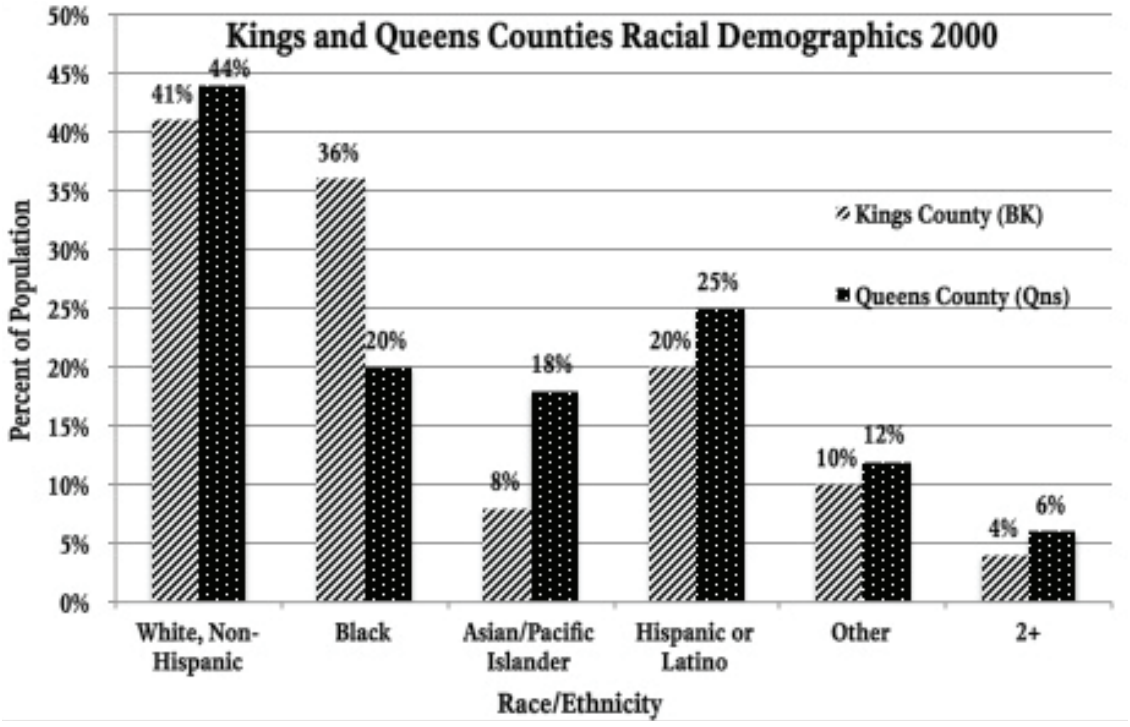


Figure 3.5 Kings and Queens Counties Racial Demographics 2000 US Census



Figures 3-5 permit one to compare recent population growth and changes in population composition in the Jamaica Bay Watershed, to similar trends in the larger city and the New York Metropolitan region. They demonstrate that the pace of racial and ethnic change in the Watershed far outstrips that of either the surrounding Boroughs or the city as a whole. The Watershed area is becoming home to a diverse, majority-minority population faster than is true of Brooklyn, Queens, or the entire city. This new aspect of the Watershed's population composition is shown in more detail for each of the Jamaica Bay PUMAS in Figures 6 and 7, which offer a comparison for each Jamaica Bay PUMA on race and ethnic variables between 1980 and 2008.

Figure 3.6 Jamaica Bay Watershed Racial Demographics 1980 US Census

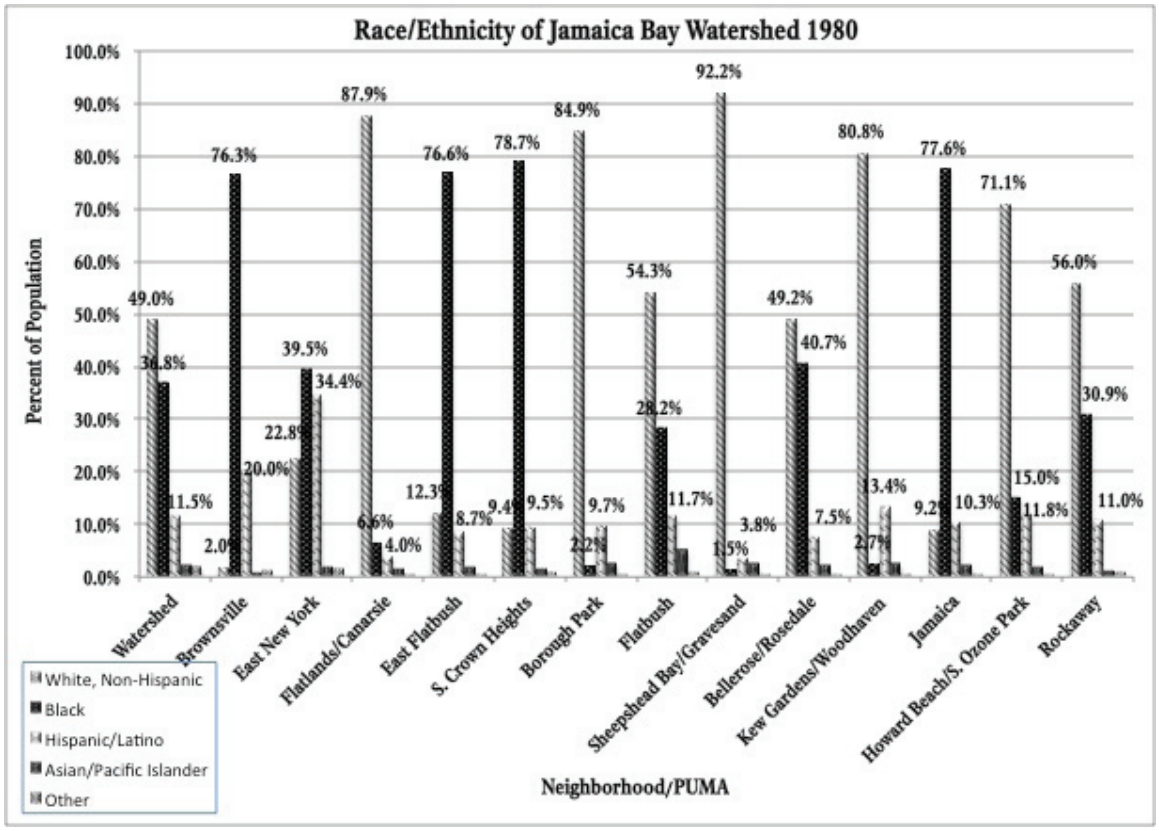
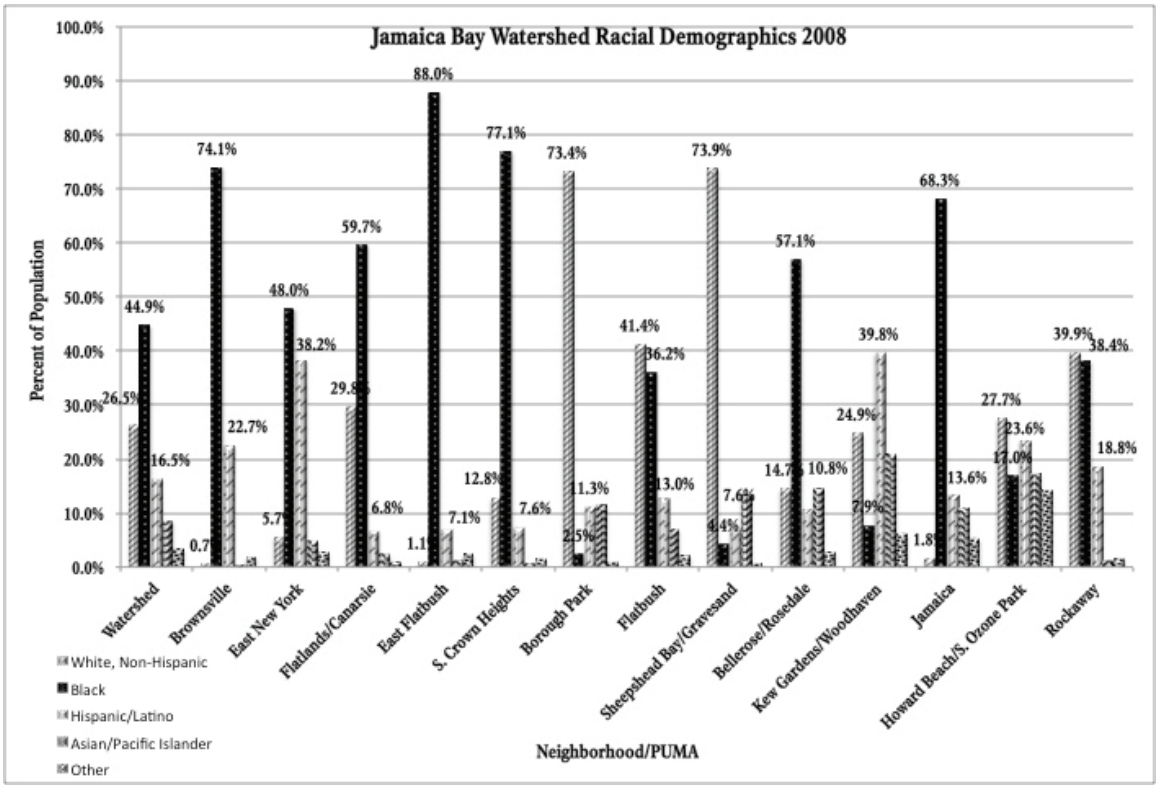


Figure 3.7 Jamaica Bay Watershed Racial Demographics 2008 US Census

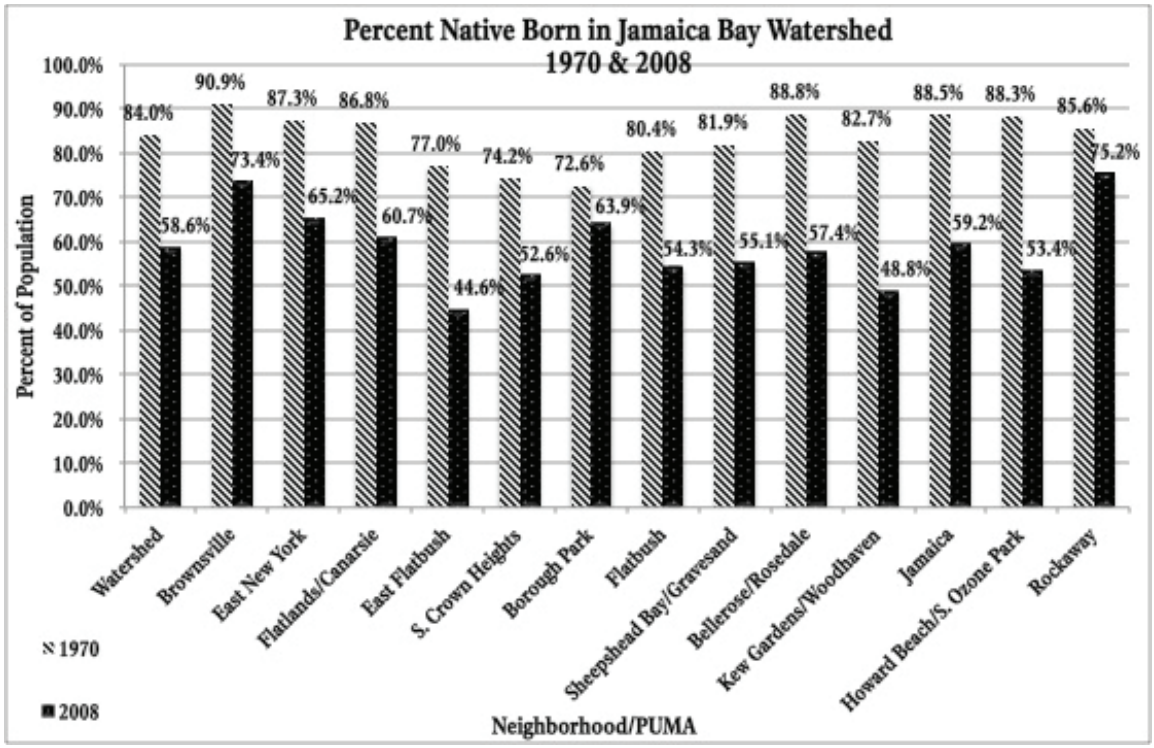


Comparing Figures 6 and 7 reveals that some of the Jamaica Bay PUMAS have retained relatively high proportions of their white, non-Hispanic populations. This is true of Borough Park and Sheepshead Bay, both of which lost ten percent or more of this older white population, but retain neighborhoods with over fifty percent of white residents. The Rockaways and Flatbush also have important enclaves of the white, non-Hispanic populations that were characteristic of the area at Gateway's inception , and as we shall see shortly, there remain other neighborhoods which are predominantly White and non-Hispanic in areas of the Jamaica Bay PUMAS that are directly adjacent to the Bay.

Table 3.3 Jamaica Bay Watershed Native/Foreign Born Population1970-2008 US Census

	1970	1980	1990	2000	2008
Native Born	**84.0%**	**75.8%**	**68.4%**	**59.6%**	**58.6%**
	1,567,857	1,315,565	1,227,146	1,172,593	1,192,481
Foreign Born	**16.0%**	**24.2%**	**31.6%**	**40.4%**	**41.4%**
	298,868	419,895	566,463	795,232	843,717
Total Watershed Population	1,866,725	1,735,460	1,793,609	1,967,825	2,036,198

Figure 3.8 Jamaica Bay Watershed Native Born Population 1970 & 2008 US Census



Foreign born

The foreign born, both immigrants and naturalized citizens, as noted earlier, account for much of the demographic transformation of the Jamaica Bay Watershed catchment area.

Figure 3.9 Growth in Jamaica Bay Foreign Born Population 2000-2008 Center For Urban Research

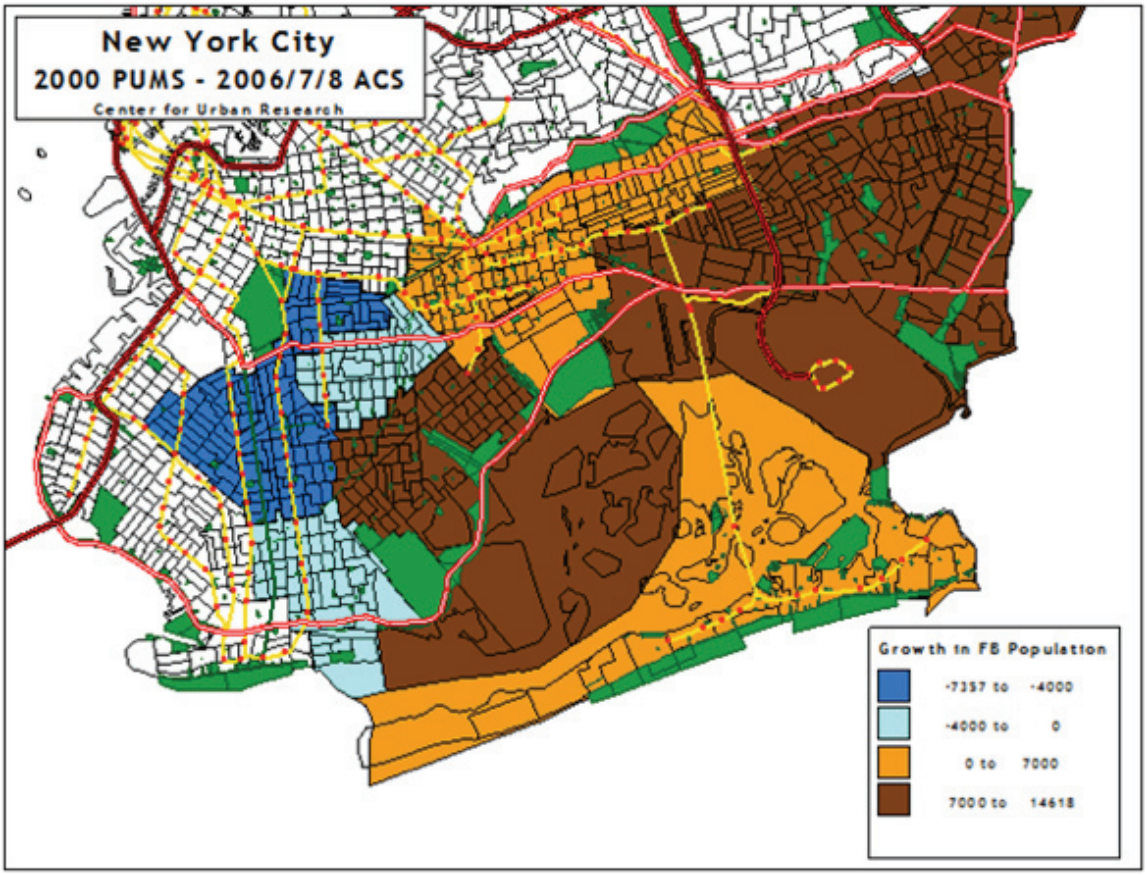
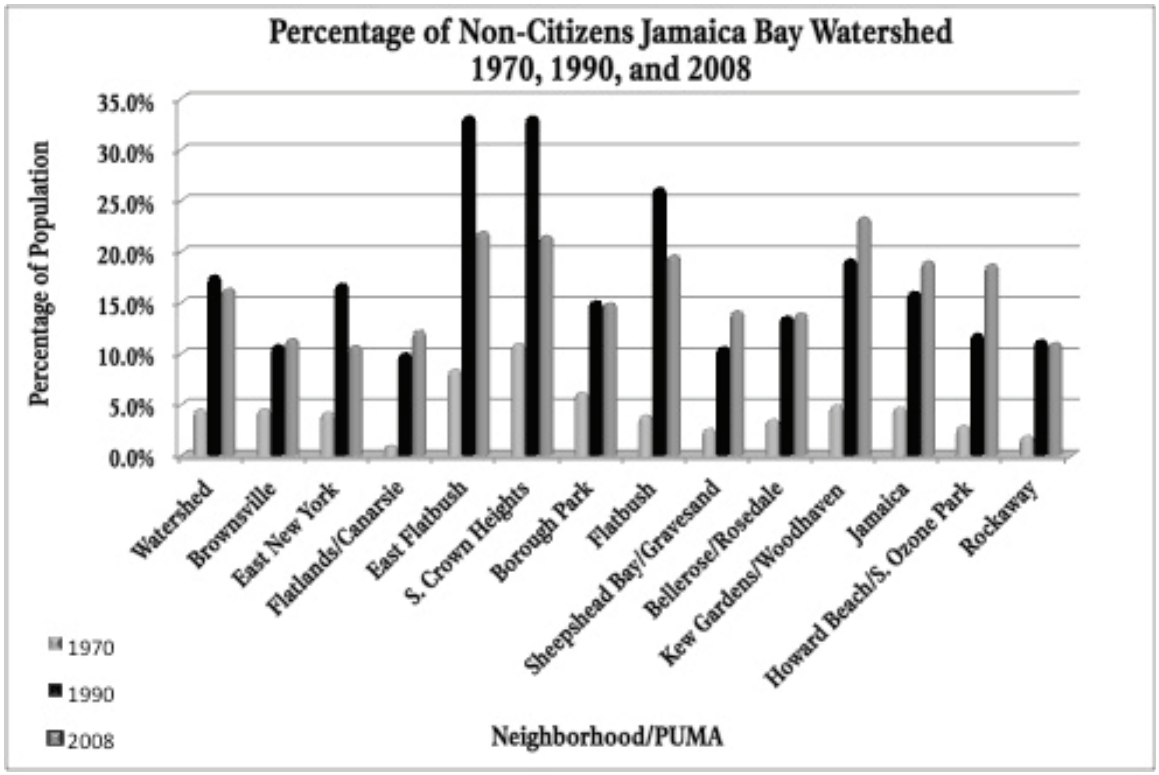


Table 3 (see above) shows that throughout the Jamaica Bay communities the percent of native born residents declined from over 80% in the 1970s to below 60% by 2008. The Rockaways, where the percent native born declined from 86% in 1970 to 75% (see detailed tables, appended) is not an exception to this trend, but, along with Brownsville/ Ocean Hill among the Jamaica Bay communities, it is a community area where the in-migration of new immigrant groups is less important in determining population composition than are population aging and replacement by households of roughly similar ethnic and racial characteristics. Figure 9 graphically compares the growth of the foreign born populations in each of the Jamaica Bay PUMAS. In this spatial mapping of growth in the foreign born population of the Watershed area, the greatest increases are visible in those community areas (PUMAS) adjacent to the Bay itself, with the relative exception of the Rockaways.

Figure 3.10 Percentage of Non-Citizens Jamaica Bay Watershed 1970, 1990 & 2008 US Census



Immigrant populations in the communities surrounding Jamaica Bay show appear to be showing every indication of assimilation and the intention to become American citizens. Figure 10 begins to demonstrate this social fact, at least as far as naturalization is concerned. Community areas where in-migration of foreign born immigrants reached a peak in the in the 1990 Census, particularly in East Flatbush, South Crown Heights, Flatbush, and East New York, show far lower proportions of the foreign born ten years later, undoubtedly the effects of naturalization and the birth of native-born children. The Watershed catchment area also includes communities where immigration was still at high rates between 1990 and 2008, especially in Kew Gardens/Woodhaven, Jamaica, and Howard Beach/South Ozone Park.

Table 3.4: Educational Attainment for Persons 25 years + in Jamaica Bay Watershed 1970-2008
Source US Census

Educational Attainment	1970	1980	1990	2000	2008
Less than HS	**31.0%**	**23.5%**	**20.0%**	**17.3%**	**20.0%**
	578,233	408,516	358,831	340,432	256,608
HS Graduate	**18.6%**	**21.5%**	**19.8%**	**18.3%**	**34.0%**
	347,839	373,291	354,992	360,034	435,726
Some College	**4.7%**	**8.0%**	**14.0%**	**14.7%**	**22.6%**
	88,449	138,117	251,657	290,159	291,165
BA Degree +	**7.8%**	**11.9%**	**15.4%**	**19.2%**	**23.5%**
	85,676	125,123	175,643	234,259	301,478
Total Population >25	1,100,187	1,045,047	1,141,123	1,225,214	1,284977

Table 3.5: % with College Degree by Neighborhood in Jamaica Bay Watershed 1970, 2008

Neighborhood	1970	2008
Entire Watershed	N/A	23.5%
Brownsville	1.4%	10.1%
East New York	2.7%	13.7%
Flatlands/Canarsie	7.8%	28.4%
East Flatbush	7.3%	18.7%
South Crown Heights	9.4%	20.3%
Borough Park	7.7%	24.9%
Flatbush	14.6%	30.2%
Sheepshead Bay	9.5%	36.2%
Bellerose/Rosedale	8.3%	28.8%
Woodhaven/Kew Gardens	7.8%	24.3%
Jamaica	6.7%	18.2%
Howard Beach/S. Ozone Park	5.1%	16.9%
Rockaway	9.7%	25.3%

Educational Attainment

Educational attainment for the Watershed catchment area is another outstanding aspect of demographic change since the 1970s. When Gateway came in to existence there were far fewer area residents who had completed college or gone beyond in their educations than there are today. Educational attainment, as measured by the proportion of adult populations who have reached various educational levels, is roughly three times higher than it was in 1970. This advance is relative among the Jamaica Bay communities,

as is evident in Table 5. Wide educational disparities remain, but all have experienced exponential improvements in the past generation. It must also be said, however, that educational attainment in the Jamaica Bay Watershed communities lags somewhat behind the city as a whole (see Table While it has fewer residents without high school diplomas, it also has fewer with college or more advanced degrees.

Table 3.6: Adult Educational Attainment, New York City Boroughs and Watershed 2008
Source US Census

Educational Attainment	BX	BK	Manhattan	QN	SI	All of NYC	JB Watershed
Less than High School	38.4%	26.3%	13.9%	21.9%	31.7%	25.3%	20.0%
High School/ GED	27.1%	29.8%	16.7%	27.2%	37.5%	26.9%	34.0%
Some College	18.7%	22.6%	14.1%	21.2%	13.0%	19.2%	22.6%
College Degree +	15.8%	21.3%	55.3%	29.7%	17.8%	28.6%	23.5%

Advances in educational attainment reflect rapidly changing expectations about preparation for adult work and careers in the globalized workplaces of the contemporary labor, and are not unique to the Watershed communities that show these trends. But immigrant-receiving communities in the earlier periods of immigration to the United States did not exhibit the same higher levels of basic educational attainment we see among the foreign born in these communities and throughout the city. As the children of the foreign born throughout the area continue to avail themselves of the educational opportunities that abound in the New York metropolitan region, these trends toward higher levels of educational achievement are certain to continue.

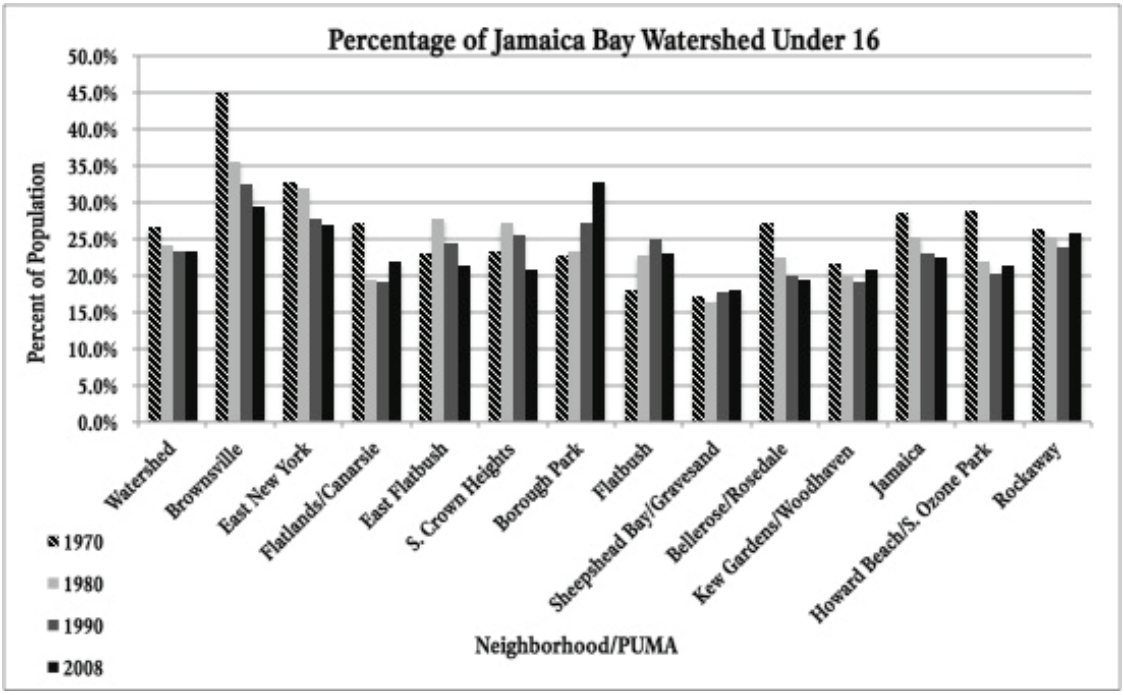
Table 3.7: Age Distribution of Jamaica Bay Watershed 1970 – 2008
Source US Census

Age	1970	1980	1990	2000	2008
Total Population of Watershed	1,872,119	1,735,460	1,793,609	1,967,825	2,036,198
Under 4 years	**8.0%**	**7.3%**	**7.5%**	**7.4%**	**7.6%**
	148,891	126,720	134,541	145,685	154,607
5-13 years	**15.4%**	**13.4%**	**13.0%**	**14.2%**	**12.6%**
	287,630	232,044	233,345	279,563	256,586
14-17 years	**6.9%**	**7.2%**	**5.7%**	**6.1%**	**6.3%**
	130,008	125,276	102,294	120,199	127,551
18-24 years	**11.0%**	**11.9%**	**10.2%**	**10.0%**	**10.4%**
	205,393	206,373	182,306	197,494	212,478
25-34 years	**12.0%**	**15.5%**	**16.9%**	**13.9%**	**12.2%**
	224,263	268,264	302,624	273,922	249,295
35-64 years	**35.2%**	**32.5%**	**34.1%**	**36.9%**	**39.1%**
	658,293	563,947	612,172	726,945	795,227
65 years +	**11.6%**	**12.3%**	**12.6%**	**11.4%**	**11.8%**
	217,641	212,836	226,327	224,017	240,454

Census figures on the age distribution of Jamaica Bay watershed area residents over the past forty years show remarkable stability when one considers the fact that much of the actual change in the population we have been discussing is due to the effects of aging among residents of area households. The proportion of persons over the age of 65, for example, in 1970 was 11.6% and in 2008 was essentially unchanged at 11.8%. Offsetting demographic effects, however, creates this seeming stability, as the older settlers, largely of white, European origins, are replaced by families of more recent immigrant origins, often with young children. Figure 11, allows one to examine these effects in the specific Jamaica Bay communities where they are occurring, as measured by changes in the proportion of persons in households who are below the age of 16. In Brownsville/Ocean Hill, we see that the population of school age children declines quite sharply after the 1970s, but remains higher than most others throughout the entire pe-

riod. In Borough Park, where large families among the orthodox Jewish population are the norm, and newcomers also have a disproportionate number of families with young children, we see a net increase in the proportion of school-age children over the period. The Rockaways and Woodhaven/Kew Gardens are examples in the watershed region of communities where apparent stability represents the offsetting effects of population aging and in-migration of families with school-age children.

Figure 3.11 Percentage of Jamaica Bay Watershed Under 16 1970-2008 US Census



Employment and household economic status figures for the Watershed area also appear somewhat anomalous. Tables 8 and 9, show that while there were relatively more people employed in the labor force in 2008, compared to 1970, the proportion of persons living in households earning below the poverty level has doubled (from 8.5% in 1970 to 17.5% in 2008). Given the effects of the severe recession that began in 2008, it is almost certain that the poverty rates will be higher when results of the 2010 census are available. In Table 10, the differences in economic well-being among the residents of different watershed communities is quite evident. This table does not include figures for the 1970 census because it is quite difficult to recreate PUMA boundaries for that census period, so that while we do include 1970 poverty estimates for the entire watershed area, it is more accurate to begin the series for PUMAS with 1980 data, as is done in Table 10. The more detailed figures in Table 10 demonstrate that poverty rates differ quite mark-

edly among the Jamaica Bay watershed PUMAS and, contrary to what one would expect from the series in Table 9, poverty rates in specific communities have actually fallen over the last forty years, while in others they have risen. Overall, there are a lot more people living in poverty in 2008 than there were in 1970, but in the most economically strapped communities, like Brownsville or South Crown Heights, poverty has decreased while remaining at far higher levels than for the entire region. In other Jamaica Bay communities, like East New York and the Rockaways, poverty rates have remained stable or decreased somewhat. It would be necessary to look at even more detailed census tract or block level data, however, to get an even more detailed understanding of the spatial ecology of poverty in any of these community areas (PUMAS). Economic well-being can change quite abruptly from one neighborhood to another. This is particularly true in the Rockaways, for example, where the western communities of Belle Harbor and Neponsit are relatively affluent, while those to the East in Arverne and Far Rockaway can be marked by poverty rates that are much higher than the average for the entire PUMA. See Appendix A: Percent Below Poverty By Neighborhood 1980-2008.

Table 3.8 Jamaica Bay Watershed Employment Status 1970-2008 US Census

Employment Status	1970	1980	1990	2000	2008
Employed	**54.4%**	**52.6%**	**55.9%**	**50.9%**	**56.1%**
	744,003	691,905	768,698	754,359	876,254
Unemployed	**2.2%**	**4.5%**	**5.8%**	**5.7%**	**4.9%**
	30,615	59,800	80,281	85,019	76,018
Not in labor force	**43.4%**	**42.8%**	**38.3%**	**43.4%**	**39.0%**
	593,069	563,001	526,625	643,139	609,585
Civilians 16 years +	1,367,687	1,314,706	1,375,604	1,482,517	1,561,857
Total Population	**1,866,725**	**1,735,460**	**1,793,609**	**1,967,825**	**2,036,198**

Table 3.9 Percent Below Poverty Level in Jamaica Bay Watershed 1970-2008
Source US Census

	Year				
Jamaica Bay Watershed					
	1970	**1980**	**1990**	**2000**	**2008**
Total Population	1,872,119	3,120,340	1,793,609	1,967,825	2,036,200
Percent Below Poverty	**8.5%**	**9.7%**	**16.9%**	**20.4%**	**17.5%**

Ethnicity and Change in the Neighborhoods Bordering on Gateway Boundaries

Substantial increases in the populations of people coming from the Caribbean islands, from Central and South America, and from Asia are transforming the communities in the Watershed area into areas of first immigrant settlement. We saw earlier that by 2008, about forty percent of residents in the area were immigrants, either foreign-born naturalized citizens (24.%), or foreign-born immigrants who were not yet citizens (16%), and that the areas of most rapid growth of the foreign born are in the Community Districts immediately adjacent to Jamaica Bay. The more detailed series of digital maps, compiled at the census tract level within PUMAS, show in even more detail that the neighborhoods directly adjacent to Jamaica Bay, notably Howard Beach, Canarsie, Starrett City and those of south Jamaica, are losing their older populations of people of European ethnicity and gaining households from the West Indies, Central and South America, and Asia.

Table 10 provides more recent census estimates about which national-origin groups are gaining and losing population in the Watershed. It is certain from this breakdown that groups practicing religious rituals in and around the waters of Jamaica Bay, notably Hindu practitioners of Guyanese and East Asian descent, people of African origins who follow various forms of Youraba-based religious rituals – especially Haitians, Nigerians, Dominicans and other Caribbean groups, and Jewish populations, whose numbers are continually supplemented by immigration from countries of the former Soviet Union and the Middle East, are those whose religious rituals are most closely associated with the ceremonial uses of Bay resources.

The digital maps appended to this chapter also indicate that there remain significant populations of people who trace their origins to the waves of immigration that settled around Jamaica Bay earlier in the twentieth century and which dominated the Watershed's population when Gateway was created in the early 1970s. Gerrittsen and Bergen Beaches, Hamilton Beach, Broad Channel, and Meadowmere Park retain to varying degrees their character as largely white enclaves where residential populations of European ethnic origins live along the water's edge and often maintain fishing boats that ply the waters of Jamaica Bay.

Table 3.10 Watershed Ancestry Groups With Doubling Of Popluation 1990-2008
Source US Census

Country of Origin	Population 1990	Population 2008
Albania	609	2100
Russia	10,000	30,000
Mexico	3,000	13,000
Guatemala	370	6700
Honduras	1900	4000
Nicaragua	700	1900
El Salvador	4200	8600
Ecuador	1700	8500
Peru	2700	5600
Dominican Republic	17,000	34,000
Jamaica	**44,000**	**86,000**
Haiti	**38,000**	**68,000**
Ghana	1100	3400
Nigeria	1200	5600
Africa	10,000	33,000
Bangladesh	786	13,000
Asian Indian	**9,000**	**58,000**
Guyana	**24,000**	**56,000**
Pakistan	2800	9500
China	17,000	26,000
Philippines	4200	9700
Japan	300	2900
Asian	847	3400

Table 3.10a. Ancestry Groups Losing Significant Population 1990 and 2008
Source US Census

Country of Origin	Population 1990	Population 2008
Austria	1100	500
Germany	4000	1500
Italy	13,000	9000
Cuba	3300	1400
Afro American	18,000	13,000
American Indian	3700	334

The following section of this chapter examines how the demographic changes presented in the charts and tables above have their impact on specific Watershed communities and their relevant local institutions. In a number of instances we report on neighborhoods and communities that are included within the larger PUMAS/Community Districts (eg. Bergen Basin) because these are the neighborhoods within walking distance to Bay resources or in which resources are present (eg. Howard Beach). Where we discuss these neighborhoods the data are based on census tract figures that can only

be reported on for the 2000 census and will not be available for 2010 for at least another year while the 2010 census is cleaned, analyzed, and tapes made available for public use. Appendix [TBD] includes a series of interactive digital maps of the racial and ethnic change at the census tract level (from the 2000 Census) that provide spatial confirmation of the trends discussed above. These maps allow the viewer to zoom in on specific areas of the Watershed to examine the spatial distribution of racial and ethnic populations as defined in the Census categories at the census tract level.

Canarsie: In the 1970s, Canarsie was a predominately Jewish and Italian-American lower middle-income residential neighborhood with a small, but growing, commercial and industrial center (NPS GMP 1979). It's minority population lived in integrated public housing projects that, as noted in Chapter 2, were built to accommodate returning military personnel and their families after World War II. Although a once thriving fishing community and waterfront resort, the Canarsie waterfront suffered from economic disinvestment and the blight associated with pollution and garbage from nearby Pennsylvania and Flatlands Avenue landfills. According to the 1979 GMP, the population of Canarsie in 1970 was 84.4%White, 14.9% Black, and .6% Other non-White (NPS 1979: 69). By 2008 the community was 29.8White, 59.7% non-Hispanic Black, 6.8% Hispanic, and 2.6% Asian.

Since the 1970s, Canarsie has witnessed significant social and demographic transition. The NYC DEP closed the Pennsylvania and Flatland Avenue landfills and transferred them to the NPS in the early-mid 1980s. Currently, the landfills are undergoing transition to parkland. The neighborhood continues to be a largely residential neighborhood, with commercial and industrial development concentrated along the main thoroughfare of Rockaway Parkway.

The neighborhood has a significant foreign-born population (37%), with many hailing from the Caribbean. Twenty-two percent of the foreign-born population in Canarsie is Jamaican, 17.3% Haitian, and 7.5% are Guyanese. Demographic change in the community has had perhaps its strongest impact on the Jewish population and its local institutions, as clearly stated in this 2004 article by Schlomo Greenwald in the Canarsie Courier (http://www.canarsiecourier.com/news/2004-12-23/Religion/093.html)

> Canarsie is one of the oldest Jewish communities in New York. Jews began populating the area before World War II when only three synagogues existed. In the 1950s, the neighborhood started to grow, with many Jewish refugees who survived the Holocaust. In no time

there were eight Orthodox synagogues, two non-Orthodox temples, several yeshivas, and at least five smaller shtiebles (Orthodox, but more informal, synagogues.)

"There were at least 15 shuls," said Rabbi Jacob Jungreis, "and they were all jammed pack. You couldn't get a seat."
Rabbi Jungreis comes from a family that once was considered something of a dynasty in Canarsie. He, his father and his brother each had a synagogue in the community — all of which were associated with their yeshiva, Ateres Yisroel. The three synagogues have since closed, and the yeshiva, which was once bustling with students from the area, now relies on students bused in from other neighborhoods to fill its classrooms.

Canarsie's primary waterfront access is from Canarsie Pier, which jets out into Jamaica Bay at the end of Rockaway Parkway. The Pier consists of a large parking lot, benches and tables lining the edge of the pier, and a picnic area that is adjacent to the pier and the beach. Visitors use Canarsie Pier for fishing, picnicking, and passive recreation, such as sitting on the beach. Additionally, information from a NPS Ethnographic Needs Assessment (1995), participant observations, and anecdotal evidence suggests that nearby Jewish populations, particularly Conservative and Orthodox groups, occasionally use Canarsie Pier and surrounding beaches for religious ceremonies, particularly in the fall during the High Holiday period from Rosh Hashanah to Yom Kippur. Given Canarsie's changing neighborhood dynamic – particularly the declining Jewish population – it is not surprising that our interviews and observations indicate that use of the area by Jewish congregations has declined and that there appear to be more uses made of the area by Santeria practitioners.

East New York and Spring Creek: From the 1920s to the early 1960s, East New York was a predominately blue-collar, residential neighborhood of Irish, Italian, and Jewish populations. According to the NPS Environmental Impact Assessment (1976), Spring Creek had a population of 15,282 (the second highest in the Brooklyn portion of the catchment area behind Sheepshead Bay), of which 68.3% were White, 30.1% were Black, and .9% "Other." Similar to other urban centers during the 1960s and 1970s, East New York suffered from economic disinvestment, racist real estate practices, and rapid White flight from the neighborhood as increasing numbers of Blacks and Latinos moved in. As a result, the neighborhood experienced overcrowding, high crime rates, high unemployment, and widespread social unrest and instability.

The collective efforts of local churches, community groups, homeowner associa-

tions, and activist groups during the late 1970s and 1980s brought improvements to the neighborhood, most notably the construction and rehabilitation of its housing stock. Local congregations facilitated the development of over a thousand Nehemiah Houses, a set of pre-fabricated two-story row houses. Despite the housing improvements, overcrowding continued to be a problem and drugs and violence permeated neighborhood streets. In 1991, the neighborhood had the highest homicide rate of any precinct in the city. Since the 1990s, local activists and community organizations have built extensive community gardens, bringing fresh produce to a traditionally underserved population. Additionally, community-policing programs have reduced crime and drug-use in the neighborhood.

Today, the neighborhood continues to be a predominately poor, minority community, with 29% of the population living below the poverty level. Almost thirty percent of the population in East New York is foreign-born, many from the Dominican Republic (23%), Jamaica (15%), Guyana (10.5%), Haiti (4.2%), and Trinidad and Tobago (8.3%), as well as Latin American countries. According to Census 2000, the census tracts closest to Jamaica Bay are now 25% White, 62% Black, 2.6% Asian, 7.1% "Other," and 16.7% Hispanic.

Although in close proximity to Jamaica Bay and Gateway National Recreation Area, the Belt Parkway, former landfills, and city buildings impede direct access to Jamaica Bay and GNRA for the East New York and Spring Creek neighborhoods.

Mill Basin and Bergen Beach: Early in the 20th century, Mill Basin served as an industrial center. The tidal action of the basin was used to grind grain and operate mills. A lack of transportation to connect Mill Basin with the rest of Brooklyn led to its demise as an industrial center. Instead, after World War II, large companies, among them Atlantic, Gulf, and Pacific, sold their property and the area became primarily residential.

In the 1970s, Mill Basin and Bergen Beach were white (Eastern European, Irish, and Italian), middle-income residential neighborhoods, with a significant portion of the population owning their own boats and docks (NPS 1979: 70). In 1970, the racial demographics for both Mill Basin and Bergen Beach were 99.3% White, .3% Black and .3% "Other non-White" (NPS 1979: 69).

In 1990, the census tracts immediately adjacent to Jamaica Bay continued to be predominately White (97%), with only .2% Black, 2.2% Asian, and 2.7% Hispanic. From 1990 to 2000, the adjacent census tracts in Mill Basin and Bergen Beach experienced

population growth of 8.6% (the fourth highest rate of growth in the catchment area). According to Census 2000, residents in the adjacent Mill Basin and Bergen Beach census tracts remained 91% White, with a growing Black population (4.6%), and Hispanic population (6.8%). The two neighborhoods have large Italian-American and Jewish populations as well as a smaller Irish population in Mill Basin. Anecdotal evidence suggests that members of Mill Basin's Jewish population (1.5% of the neighborhood's foreign-born population is from Israel) might also use the nearby Bay for religious ceremonies similar to those taking place at Canarsie Pier.

Mill Basin is known as an upper-middle class neighborhood with large homes, waterfront property, and good schools. The presence of over 200 private docks, the Bergen Beach Yacht Club, and the Mill Basin Marina indicate the popularity of boating in the neighborhood. In addition to it bulk headed, waterfront properties, the neighborhood is known for attracting new residents because of its schools, particularly PS 312 and 236, both of which rank in the top 3 percent of city schools. Commercial development is concentrated along Ralph Avenue and Avenues N, T, and U, with Kings Plaza Shopping Center located on the neighborhood's edge of Flatbush Avenue and Avenue U.

Bergen Beach and Floyd Bennett Field, particularly Dead Horse Bay and the northeast beach (closest to the boat launch and camping facilities), are occasional sites for religious ceremonies. Specifically, Santeros, Tamil Hindus, and "Voodoo Practitioners" use Bergen Beach for animal or non-animal offerings and healing ceremonies. While Hassidic Jews, Paleros, Santeros, and "Voodoo Practitioners" have been known to use Floyd Bennett Field for animal or non-animal offerings, harvesting and gathering, and for other religious celebrations.

Gerritsen Beach and Sheepshead Bay: Gerritsen Beach is a relatively isolated community surrounded by Shell Bank Creek and Gerritsen Creek on the sides and Plumb Beach to the South. In the 1970s, Gerritsen Beach was a predominately White, Irish and Italian American, middle-income residential community characterized by densely packed summer bungalows that had been converted to year round housing (NPS 1979: 70). According to the 1970 Census, Gerritsen Beach was 99.5% White, .1% Black, and .3% Other, non-White (NPS 1979: 69). Sheepshead Bay was 99.2% White, .3% Black, and .4% Other, non-White (NPS 1979: 69).

In 1990, Gerritsen Beach had a White population of 97.6%, with no notable Black

population, a growing Asian population (1.8%), and an increasing Hispanic population (3.6%). From 1990 to 2000, Gerritsen Beach grew by 3.3% (one of the lowest rates of growth in the catchment area, second only to Howard Beach). Today, Gerritsen Beach continues to be predominately Irish, and many express a sense of community in the neighborhood and "ownership" over the natural resources, particularly the creek. Gerritsen Beach is home to Kiddie Beach, a private beach for members of the Property Owners Association. At a recent Gerritsen Beach boat race, community members stated that Gerritsen Beach was one of the "best kept secrets in New York" and that they "wanted to keep it that way."

Sheepshead Bay was once a thriving fishing community with fishing boats lining Emmons Avenue adjacent to numerous bait and fish shops. Although the charter fishing fleet continues to operate, at reduced numbers, from Sheepshead Bay, the commercial fishing industry has largely declined, as has recreational fishing other than on the head boats. One bait shop remains to service the community, which is now largely a middle-class residential community..

The Sheepshead Bay census tracts adjacent to Jamaica Bay remained primarily White (91.9%) in 1990; however, the Black population grew to 3.9%, the Asian to 2.8%, and the Hispanic population to 5.3%. From 1990 to 2000, Sheepshead Bay's total population grew by 5.0%. In 2000, the White population in the census tracts adjacent to Jamaica Bay had declined to 84.5%, with the Black population rising to 5.3%, the Asian to 6%, and the Hispanic population to 6.8%.

There are a number of immigrant communities in Sheepshead Bay, with 58% of the population being foreign-born. While Russians predominate in the neighborhood (21% of the foreign-born population in 2000), a number of Orthodox Jews, and Italians live in the area, and there is a bourgeoning Asian community around Avenue U.

Earlier studies indicate that Santeros, Tamil Hindus, and "Voodoo practitioners" used Plumb Beach for animal or non-animal offerings and healing ceremonies. Additionally, Plumb Beach was once a popular site for homosexual activity. A March 2010 article in the *NY Post* reported that the Park Police arrested a number of individuals for illicit sexual activity at the Beach, indicating the continued use of the site for these purposes. Interviews with Gateway staff and with local residents indicate that religious uses of Plum Beach may continue intermittently but appear to have declined over the past twenty years.

Howard Beach (Hamilton Beach, Ramblersville, Old Howard Beach): Within the larger Howard Beach/Ozone Park community area, Howard Beach was once a thriving fishing and boating community and, during the 1950s and 1960s, one of the most rapidly growing neighborhoods in Queens (NPS 1979: 69). In the 1970s, the neighborhood was predominately White, with a large Italian, Irish, and Jewish population.

In 1990, 95.3% of the population was White, with 1.1% Black, 2.1% Asian, and 5.9% Hispanic. The total population of the census tracts nearest Jamaica Bay grew 2.5% between 1990 and 2000, the lowest growth rate of any community within the catchment area. Today Howard Beach continues to be a predominately White (92.5%), largely Italian (46%) residential community, with a small, but growing minority population. In 2000, 1.0% of the population was Black, but 2.8% of the population was Asian and the Hispanic population had increased 70% to 9.8% of the population.

The main commercial thoroughfare of Cross Bay Boulevard separates Howard Beach from the smaller neighborhoods of Old Howard Beach, Hamilton Beach and Ramblersville. These early bay settlement areas are nestled between Shellbank Basin and John F. Kennedy Airport, with a series of canals and creeks cutting through the middle. Wooden boardwalks connect the houses, many of which are small bungalows built on stilts with docks and small boats.

Frank M. Charles Memorial Park borders Jamaica Bay and sits at the southern tip of Howard Beach. The park contains five tennis courts, three baseball fields, a handball and basketball court, a bocce court, a playground, and some benches and picnicking facilities. Primarily near-by residents, many of which are Italian, use the park as a space for recreation and relaxation. Bocce is traditionally an Italian recreational activity that serves to reinforce ethnic identities. On a warm summer weekday, 50 to 75 people typically frequent the park and avail themselves of various park facilities.

Just over the footbridge that crosses a small canal, Hamilton Beach Park consists of a small playground, a baseball field, and some beach access. The park runs up against the A-train subway trestle that crosses the Bay and people use the park beach for subsistence fishing.

The North Channel Bridge, also known as the Joseph P. Addabbo Memorial Bridge, runs south from Howard Beach, over the Grassy Bay portion of Jamaica Bay, to Broad Channel. People park on either side of the bridge (although only the southern edge has official parking) to fish, either from the bridge, or down below the bridge.

Conversations with NPS rangers and people fishing from the bridge indicate that most of them fish for subsistence. A recent *New York Times* article described the fishing practices of a group of Bengali immigrants who fish spearing for subsistence from the North Channel Bridge parking lot. Locally, spearing is commonly used as a baitfish. However, this group prefers to stir-fry the small fish in curry and other spices, enjoying it with rice. When asked about eating a baitfish, one man stated, "We like it. This is like, you know, our culture." A Dominican fisher described his process of pan roasting the fish he catches – mainly blue fish – in a wine sauce with herbs before eating. In addition to fishing, people stop-off in the southern parking lot for picturesque views of the Bay and to watch planes take off from nearby JFK airport.

The North Channel Bridge is also a popular site for Tamil Hindu religious ceremonies. Water plays an important part in the Hindu faith, symbolizing purity, the giver of life, and the destroyer of evil. Water is essential for attaining purity and avoiding pollution, both physically and spiritually. Physical and spiritual purity allow the individual to focus on worship.

There are over 50,000 Indo-Caribbean in New York City, most coming from Guyana, Trinidad and Tobago, and Jamaica. Indo-Caribbean Hindus began migrating in large numbers to the United States in the 1970s and 1980s to escape political strife in Guyana and after the collapse of the oil industry in Trinidad. Liberty Avenue in Richmond Hill, roughly 8 miles from Jamaica Bay, is known as "Little Guyana" and is the center of the Guyanese Hindu community in New York. According to Census 2000, 36% of Richmond Hill's foreign-born (zip code 11418) are Guyanese and 7.6% are from India.

The local Hindu population has worshiped at the North Channel Bridge for at least two decades. Use of the Bay is especially important in Hindu birth, wedding, and funeral ceremonies. Hindus make offerings to deceased souls for 10 days following death, citing their belief that because humans come from the elements of earth, it is necessary, in death, to return to the earth. As such, placing ashes in the water is an important component of their cultural beliefs.

During regular Hindu prayer services, known as pujas, individuals make offerings to the beach and to the water because they are living beings that deserve respect. Offerings placed in the water include rice, cloth, flowers, fruits, statues, and other desirables; each object contains symbolic significance, e.g., flowers offered symbolize the good things to blossom. Puja residuals often wash up on the shore underneath the bridge

and on the beach of Frank M. Charles Memorial Park. Initial research indicates that members of surrounding communities, local fishers, and environmental groups have expressed concern and responded unfavorably to the remnants of the ceremonies and, at times, to the people and the ceremonies themselves, resulting in user conflict over this space. The Chair of Community Board 10 feels that cultural education about the Park's regulations would balance the concerns of local citizens and ensures that the Hindu community could exercise their religious rights (Personal communication March 2010). NPS employees are working with nearby Hindu communities to educate them about the prohibitions against leaving materials behind in national parks and about the ecological effects of such materials on the Bay. A sign stating "Leave No Trace" and describing National Park sanitation policies sits at the base of the North Channel Bridge.

Conversations with community members and NPS rangers indicate that the Hindu community is struggling to reconcile the interpretation of religious doctrine with the laws and regulations of their new homeland as well as with a growing environmental awareness. There is disagreement within the Hindu community over the need to leave puja offerings behind. A few Hindu leaders, who are working closely with the NPS, argue that there is no need to leave puja materials behind and point to scripture as the basis for their argument. Others in the community do not feel this is an accurate interpretation of scripture and are leery of breaking with tradition and rebuking authority. We discuss these issues in greater detail in Chapter 5 of this report.

Ozone Park: Ozone Park and South Ozone Park developed in the early 1900s as Italian, Irish, and German working-class neighborhoods. In 1990, the census tracts nearest Jamaica Bay were 89.9% White, 1.5% Black, 3.9% Asian, and 12.6% Hispanic. From 1990 to 2000, the census tracts nearest Jamaica Bay experienced population growth of 28%, the second highest rate of growth in the catchment area. In 2000, the census tracts nearest Jamaica Bay had changed to 60% White, 3.0% Black, 11.3% Asian, and 28.7% Hispanic (an increase of 191%). In the adjacent census tracts, 40% of the population is foreign-born, with 27% of that population coming from Guyana and 10% of that population coming from the Dominican Republic. A significant Italian presence remains in Ozone Park and there are a number of Italian-American businesses along 101st Avenue, a main commercial thoroughfare.

South Ozone Park is primarily a residential neighborhood with the exception of the Aqueduct Race Track and nearby John F. Kennedy Airport. In 1990, the census

tracts nearest Jamaica Bay were 57% White, 26.1% Black, 7.5% Asian, 8.5% "Other," and 22.1% Hispanic. From 1990 to 2000, the total population in the census tracts adjacent to Jamaica Bay grew by 27%, the third highest growth rate in the catchment area. Since 1990, the adjacent census tracts changed significantly, with a White population of 28.2%, a Black population of 24%, an Asian population of 14.6%, a population of 17.7% claiming "Other," and a Hispanic population of 25.6%. South Ozone Park is also home to a large foreign-born population (38%), of which 35.4% are Guyanese, 9.7% Jamaica, 6.1% Dominican, and 4.6% Haitian.

The Airport provides a number of residents with jobs but also serves as a major source of air pollution. In 1949, 80,000 airplanes used JFK each day; in 2007, the number of planes neared 300,000 per day. Local organizations have been working with the Port Authority of NY/NJ to alleviate noise pollution, and residents were happy to see the supersonic Concorde retired in 2003. Additionally, local environmental groups have pressured the Port Authority to address water pollution in the Bay, arguing that de-icing materials and petrol-chemicals from JFK contribute to marshland loss.

Rockaway Peninsula (Neponsit Belle Harbor, Arverne, Rockaway, Rockaway Park, and Hammels: The Eastern portion of the peninsula, comprised of Edgemere, Far Rockaway, Arverne, and the Hammels, most vividly reflects the area's recent struggles with urban renewal and development. The area is home to at least 5 public housing projects, including Hammels Houses, Redfern Houses, Beach 41st Houses, Carlton Manor, and the Ocean Bay Apartments, previously known as the Edgemere Houses and the Arverne Houses. The Edgemere Houses are notorious for having one of the highest homicide rates in the city's housing projects. In 1990, the census tracts nearest Jamaica Bay in Eastern Rockaway were 37.8% White, 51% Black, 1.9% Asian, 8.9% "Other," and 17.9% Hispanic.

Over the past ten years, a flurry of development has occurred on the Eastern edge of the peninsula. The city and private companies have built or started construction on thousands of multi-family condominiums and high-rise apartment complexes. Nonetheless, Rockaway development continues to stall and a local official has deemed Rockaway the "ground zero" of the recent foreclosure crisis. A number of unsold housing units are increasingly being used to house the formerly homeless so developers can recover part of their lost investment.

According to the latest census tract data (2000), the tracts nearest Jamaica Bay in

Eastern Rockaway are 57% Black, 19% Hispanic, 2.0% Asian, 9.0% "Other," and 26.0% White. The Far Rockaway and Edgemere communities have a large and diverse foreign-born population (at 32%), of which 19% are Jamaican, 12% are Guyanese, 9.3% are Salvadorian, 6.3% are Guatemalan, 5.8% are Haitian, 5.7% are Dominican, 3.8% are Ukrainian, 3.6% are Russian, 1.7% are Polish, and, .7% are Israeli.

In Far Rockaway, near the towns of Lawrence and Inwood, is a large Haredi Jewish population. Haredi Judaism is an umbrella term that describes "Ultra-Orthodox" Jews. The Jewish population of Far Rockaway participates in several Jewish religious practices involving Jamaica Bay resources, which are described in much more detail by religious leaders from the area in Chapter 5.

The Western Rockaway Peninsula is made up of the neighborhoods of Belle Harbor, Neponsit, Rockaway Park, and Breezy Point. The NPS 1979 GMP described Belle Harbor and Neponsit as upper-middle class, predominantly Jewish settlements, with some of the most desirable housing in Queens and a large, elderly, institutionalized population living in well-maintained homes for the aged (pg. 69). The Neponsit Property Owner's Association works hard to maintain the tight-knit feel of the community, in part by securing a ban on street parking in the neighborhood from May through October. The consequence of the street-parking ban is an exclusive and semi-private beach for local residents. Nearby Breezy Point is an enclave community consisting of a gated year-round cooperative. The area is popularly referred to as the "Irish Riviera," with over 60% of the population claiming Irish ancestry. However, Italian and German families were also represented in the community from its earliest founding, and in the Roxbury neighborhood people of German origins were among the first settlers.

In 1990, the Western Rockaways were 95% White, 3.0% Black, 1.3% Asian, and 3.3% Hispanic. From 1990 to 2000, the Western Rockaway population grew 4.6%, the third lowest in the catchment area. The area is now 92% White, 2.7% Black, 2.0% Asian, and 5.8% Hispanic. Roughly 12% of the Western Rockaways are foreign-born, of which 18.5% are Irish, 9.3% are Polish, 7.5% are Israeli, 7.0% are Filipino, 4.5% are Russian, and 3.8% are Italian.

The Breezy Point tip is part of the Gateway National Recreation Area. Local populations use the area for fishing – either for subsistence or for small-scale commercial purposes. The Breezy Point tip is also a nesting site for the endangered Piping Plover. Many local residents disagree with National Park Service policies forbidding recre-

ational activities that pose a threat to the endangered Piping Plover, such as the use of off-road vehicles.

There are two private beach clubs on the Western edge of the Rockaway Peninsula, the Breezy Point Surf Club and the Silver Gull beach club. Over the past year, the beach clubs were forced to open their doors to public visitors who can purchase a day-pass, for $60-$150 for adults. Although the Breezy Point Cooperative and the two beach clubs are not officially part of the Park, residents have expressed strong sentiments about the natural resources of Breezy Point and western Rockaway, as well as the Park Service's management of these areas. During a recent NPS GMP Open House, residents of Breezy Point and beach club members described the sense of community here and their personal attachment to these spaces. Many feared that the Park Service's new GMP would require closing the two beach clubs, stating that it would be "a sin" and an "emotional loss" if the clubs were closed. A few of those in attendance expressed concern that the beach clubs are the last remaining piece of "Americana" and should be saved as a bastion of "truly" American culture.

The Western edge of the Rockaway Peninsula is also home to GNRA's Jacob Riis Park and Ft. Tilden. Jacob Riis Park is known as "the people's park" because of the diverse crowds that frequent the beach. A series of jetties and wood pilings divides the beach into 14 Bays. William Kornblum's 1975 study of Riis Park described the informal segregation of the beach and the distinct character of the different Bays. Bays 1 and 2 were known as gay beaches and Bays 5 and 6 as a Black American meeting place with music and parties (Low et al. 2000). A 2000 Rapid Ethnographic Assessment Procedure (REAP) by Low et al. found that Bay 1 retained the association as a gay, adult beach with people of diverse racial, ethnic, and socio-economic backgrounds.

In Bays 5 and 6, there are an increasing number of Latino and Caribbean people taking advantage of the nearby barbequing and picnicking areas. Many use this site for meeting family and friends, cooking traditional foods, and reinforcing their sense of cultural identity and attachment to their homeland through their interactions with members of their social group. Recent observations indicate that this area is quite crowded and that people arrive early on weekends to secure a spot. The limited amount of shade and the prohibition against personal grills creates user conflict over the space.

Bay 14 marks the boundary between Jacob Riis Park and Ft. Tilden beach. Bay 14 is informally associated with members of the Bay Ridge community in Brooklyn. The

Bay is further from the center of activity and is often used by groups of young white adults for drinking as well as sunbathing and swimming. Patrons of Bay 14 cited the lack of facilities – bathrooms, showers, food, or lifeguards – as their primary complaint about the area.

A 1995 Ethnographic Needs Assessment found that religious groups – notably Christians, Paleros, Santeros, Tamil Hindus, and "Voodoo Practitioners" – use Riis Park, Ft. Tilden, and the Breezy Point tip for baptisms, healing and other religious ceremonies, some of which include animal or non-animal offerings. Our observations and interviews indicate that these practices are increasing along the Rockaway beaches, but appear to be less common within the boundaries of Gateway N.R.A. See chapter 5 for more about these uses.

Broad Channel: Broad Channel is the only inhabited island in Jamaica Bay and remains a relatively isolated, boating and fishing oriented community. Broad Channel is a predominately Irish, middle-class neighborhood and like the Western neighborhoods of the Rockaways, is home to a significant number of New York City firefighters, police offers, and civil service employees. As noted earlier, Channelites, as they are commonly known, have long-term relationships with the Bay and have been a vocal constituency in shaping Park policies. In fact, there is a general sense of "ownership" over the natural resources. Traditional cultural practices among residents of Broad Channel include bait digging within the Bay, commercial and recreational fishing, and picnicking on interior island beaches. Broad Channel is also home to Eco-Watchers, an environmental interest group that addresses marshland loss in the Bay and is active on a number of Jamaica Bay environmental committees.

Creation of Gateway N.R.A. and subsequent negotiations with the City of New York allowed homeowners in Broad Channel, who formerly paid ground rent to the City, to gain deeds to the property on which their homes are built. This change has permitted the growth of a more active real estate market on the island than existed before the creation of the GNRA. In consequence, the population of Broad Channel is experiencing demographic changes that promise to alter the traditional culture of the island neighborhood. In 1990, Broad Channel was 99% White, .08% Black, and 1.6% Hispanic. From 1990 to 2000, Broad Channel's population grew 5.9%. According to the latest Census data, Broad Channel is now 97.3% White and 4.9% Hispanic. The detailed census tract data that will become available after the 2010 Census is published will no doubt

show additional heterogeneity by ethnicity and socio-economic status in this island community.

Orthodox Jews, Korean Buddhists, Santeros, and "Voodoo Practitioners" occasionally use the two ponds at the Refuge for religious ceremonies that include animal or non-animal offerings. Recent conversations with NPS rangers also indicate that large numbers (in the hundreds) of nearby Jewish residents walk to the Refuge on religious holidays for relaxation and to enjoy the open space. Our field observations and interviews strongly suggest that most recently some of those who would have come to shoreline places within Gateway for their rituals, are tending to make use of Rockaway beaches administered not by the Park Service but by the City of New York but also part of the Bay estuary.

Conclusion: Change in Continuity in the Jamaica Bay Watershed Communities

The outstanding finding presented in this chapter is the fact that immigration into the region since the 1970s has bought new cultural groups into the communities whose ranks continue to grow as the populations of older white-ethnic neighborhoods continues to decline. There are exceptions to this revealed in the demographic analysis as well. Residents of some of the older Bay enclaves like Belle Harbor, Neponsit, the Breezy Point Cooperative Community, and Gerritson Beach, still maintain vital local neighborhood affiliations, as we shall see in the next two chapters. But in others, notably Broad Channel, Howard Beach, Canarsie, and other neighborhoods along the Bay's Eastern perimeter, the signs of population change, either due to the arrival of new cultural groups or to the effects of rising property values are unmistakable.

As in many communities and urban regions throughout the United States, the previous decades have brought greater inequalities of wealth and income to the Jamaica Bay Watershed region. The demographic analysis presented so far has shown that despite rising educational levels in the Watershed communities, there has also been a marked increase in the proportion of residents living below the official poverty level. African American neighborhoods of Brownsville, East New York, Ocean Hill, and Crown Heights were poorer than others served by Gateway when the park system was first created. But census time series data shows that there has been a continuing out-migration of more middle class households and in most of these neighborhoods either an increase in poverty rates or a continuation of relatively high poverty rates during the entire period.

More affluent African American neighborhoods in Jamaica and Rosedale, which border on the Bay's Eastern shores, have experienced increasing proportions of middleclass households with levels of education and income that do not differ from non-minority middle class neighborhoods and community areas in the Watershed region. But the overall increase in poverty levels, which include disproportionate numbers of families with young children, continues to present a significant challenge to park personnel at Gateway as they attempt to reach less advantaged population groups in the catchment area.

In the communities of Ozone Park, Canarsie, and East New York, that are among those receiving the greatest influx of immigrants, the cultural groups that have so far made the most use of Gateway resources for essential cultural and religious rituals are people of Guyanese-Hindu background, people from the Indian sub-continent, who are also Hindu religious practitioners, and people of African and Carribbean origins, many of whom practice various forms of Santoria religious rites that derive from Youruba origins in West Africa and were brought to the New World by slaves and their descendants. These groups, along with many new and older Jewish Congregations, are most likely to make occasional or regular use of Jamaica Bay resources for religious purposes, a subject which is analyzed in greater depth in Chapter 5 of this report.

People of the Bay, who maintain profoundly cultural and historic attachments to the resources of the estuary, are the subject of this report's next chapter. The observations and interviews we compiled with their help, point to a variety of ways in which their uses of the Bay have changed in the past forty years. Far from being a homogeneous group, they nonetheless comprise the population that continues to make the most intense use of Bay resources. And from their ranks originate the most active participants in efforts to restore the Bay's endangered resources.

Chapter Four
People of the Bay: A Vanishing Culture?

"I am a part of this Bay as much as the ducks, geese, and plovers." – Larry Seaman Jr. (2010)

Larry Seaman Jr. embodies a challenge that has faced Gateway since its inception – the need to balance natural resource management with the concerns and demands of an urban population. Gateway's challenge is unique, in some ways, because of the lengthy history of, and deep attachments among, the people living along Jamaica Bay. This section of the ethnographic overview and assessment documents the "ongoing significance or importance" of Gateway's natural and cultural resources stemming from people's traditional use of Gateway's resources and their identity as a coherent group or people around this resource use (SOW pg 3).

The Jamaica Bay communities have, in their own ways, established a certain way of life oriented towards Jamaica Bay and its creeks, marshes, and islands, thereby distinguishing these communities from more casual users of Gateway's natural and cultural resources. This way of life is steeped in traditional uses and generational attachments to the Bay and its resources. As Mr. Daniel Mundy Sr., of Broad Channel, states, "The town has been part of the Bay and the Bay has been part of the town for over 100 years now" (Mundy Sr. 2010). The following section focuses on the various manifestations of this Jamaica Bay "way of life," first discussing livelihood, then recreational, and finally, protective attachments to the Bay. Local communities have participated in fishing, boating, birding, swimming, trapping/hunting, nature observation, open-space resource use, opposition to Bay pollution, and habitat restoration for generations. Far from being mutually exclusive, these categories often blend together; for example, longtime recreators might find themselves in new roles as Jamaica Bay protectors. Consequently, the Jamaica Bay way of life is dynamic, maintaining some deep and traditional attachments to the Bay, while incorporating, and adjusting to, the ebb and flow of urban living. Therefore, the Park and local communities should come together to develop a relationship that recognizes residents' traditional relationships to the Bay while adapting to the changing nature of these attachments.

Jamaica Bay Livelihoods

> "O shad, O shad, ketched every day, Right down into Jamaica Bay. It is good for the father, It is good for the son, And it is good to be ate by

every one" Captain Jack 1882[1] *BK Eagle*

Jamaica Bay's waters and shores have long served – in varied forms and with varied success – as a source of livelihood for communities along the Bay. Black (1981) argues that despite the abundance, variety, and quality of fin and shellfish in Jamaica Bay, prior to 1865, the bulk of the population along the shores engaged in farming as a livelihood, with fishing and hunting supplementing their incomes. In 1840, only 60 men in the village of Flatlands earned their living from Jamaica Bay (Black 1981). However, after the Civil War, and with improved transportation to and from Jamaica Bay, the area took on increasing importance for fishing, boating, recreation, and vacationing, all of which provided employment for those living along Jamaica Bay's shores.

Despite the rise in commercial fishing after the Civil War, Black (1981) notes the difficulty in determining the number of people engaged in fin-fishing for their livelihood, but remarks that local fishermen sold their catches to nearby restaurants and hotels and to wholesale and retail fish dealers in Canarsie and at the Fulton Fish Market in Manhattan (Black 1981: pg. 62). A *Brooklyn Eagle* article quotes a long-time Canarsie fisherman boasting, " Why, I have caught as many as 298 fish of an aggregate weight of 3,000 pounds in a single day from the good boat Skeeter," noting that it took "two wagon loads to carry all the fish away" (*BK Eagle* 1882). Estimates from 1888 claim $10,000 worth of bluefish shipped from Canarsie each year (*BK Eagle* 1888).

In addition to fin fishing, oystering and clamming were common livelihood sources in Jamaica Bay, but the size and value of the industry is also difficult to determine. Generally, two types of people worked the shellfish beds, poor baymen and those with significant capital to invest in the industry (Black 1981). Black (1981) cites an 1882 report from Rockaway that claims 100,000 bushels of oysters annually were taken from Jamaica Bay, worth $400,000, with 800 planters and shippers and 400 other men employed in the industry. However, a 1904 state report claims 350,000 bushels of oysters were produced yearly, with a value of only $301,800, and 150 men engaged in oystering. By 1916, a different report claims 750,000 to 1,000,000 bushels of oysters were planted annually, with an investment of half a million dollars and a total of 1500 persons employed in oystering and clamming in the Bay (Black 1981). Initially, oystering was more popular than clamming, however, because of inconsistencies in

1 In 2010, the NY State Department of Environmental Conservation (DEC) prohibited the taking and possession of American shad because of declining populations in New York waters.

oyster harvesting, many oyster planters turned to the Bay's prolific clam beds for their living. A *Brooklyn Eagle* article describes the Jamaica Bay clammer:

> The true clammer is a hale, hearty fellow. He is a good friend and bad enemy. He makes no pretensions to dress, his only object being to keep warm. He loves his family, and next to these his flat bottomed skiff boat, which carries him about the bay…The man who catches clams for a living is, during a part of the year, the richest man in the little hamlet where he resides. During the season, he can make from $3 to $10 per day. His hours of work are about the same in number as those of a bank president, as he can ply his trade only while the tide is out and flats exposed…He knows little of what is going on in the outside world and cares less…[But] He knows all about his fellow workmen on the bay, what their catches average, how disposed of and the price obtained. He knows also the depth of water in every part of the bay, the currents, the moment the tides turn, and what is most important of all to him, where the largest and best clams grow. *Brooklyn Eagle*, October 14, 1900.

As Jamaica Bay became a popular fishing and recreational spot, hotels, bait shops, and boat rental facilities opened to serve the growing crowds. James Remsen's Seaside Hotel in Rockaway opened in the late 1850s. The hotel was known for its fine accommodations and its capacity to house 300 guests. In Canarsie, the Diamond Point Hotel and Pier on East 92nd Street catered to growing summer crowds (Hendrick 2006). By 1893 four fishing stations existed along Jamaica Bay at Goose Creek, the Raunt, Broad Channel, and Beach Channel and local stores rented at least 250 rowboats to amateur fisherman on the weekends (*BK Eagle* 1893; Hendrick 2006).

After the turn of the century, Jamaica Bay's commercial fishing industry declined precipitously when pollution from nearby sewage outfalls contaminated Jamaica Bay's oyster beds.

> During the Spring of 1912, a thorough investigation of Jamaica Bay and estuaries was made and taken for bacteriological analysis. As a result of this investigation, the "floating" or "Drinking" of oysters in Jamaica Bay is now forbidden. This practice is also forbidden in Indian Creek and Canarsie Creek. *NY Times* 1914.

Health officials linked Jamaica Bay oysters to several cases of typhoid, leading the city to permanently close Jamaica Bay to oystering in 1921.

Jamaica Bay, Foul With Sewage, Closed To Oyster Beds; 300,000 Bushels Gone

New York Times Jan. 30, 1921

Despite the closing of shellfish beds, commercial fin fishing and recreational fishing continued. In 1927, police estimated nearly 5,000 people fishing from Cross Bay Boulevard and Beach Channel Drive (*NY Times* 1927). In 1929, the chairman of the fishery committee for the Rockaway Beach Board of Trade convinced the US Bureau of Fisheries that Jamaica Bay was healthy enough to receive shipments of tomcods and other young fish for restocking Jamaica Bay (*NY Times* 1929).

Although pollution caused fishing to decline, Jamaica Bay retained its popularity as one of the best fishing spots along the Eastern seaboard well into the 20th century. Consequently, Jamaica Bay continued to serve as a livelihood source for local communities into the 1950s and 1960s, although to a lesser degree than in the heydays of the late 1800s and early 1900s. Mr. Jim Ash, formerly of Howard Beach, and Mr. Larry Seaman Jr., of Meadowmere, both recall 'Mary's Bait Barge,' run by a coarse woman affectionately known as "Killi Mary" who trolled the waters of Jamaica Bay on her barge, harvesting killi and other bait fish. When anchored, her barge sat off Floyd Bennett Field, where she would sell bait, tackle, and sodas to fishermen who came past.

Mr. Jim Ash, Mr. Larry Seaman Jr., and Mr. Daniel Mundy Sr. also recall earning money as kids by trapping and fishing along Jamaica Bay. Mr. Ash remembers the article that prompted his trapping endeavors. A *Brooklyn Eagle* headline read "Yikes, Tallyho, There are Muskrats!" After the article ran, he and his father bought traps and how-to books, trapping muskrats and mink in the marshes along Jamaica Bay. Both Mr. Ash and Mr. Seaman recall the times when Sears & Roebucks would come to the different neighborhoods along the Bay to buy pelts from the "farm boys." Mr. Ash, as opposed to selling his pelts to the companies, took them directly to the fur district in Manhattan. Despite eliminating the middleman, Mr. Ash barely broke even selling pelts, but continued to trap because he loved being on the marshes. Rather than muskrats and mink, Mr. Mundy Sr. caught killis to sell as bait, making fifty-cents a quart. Mr. Mundy Sr. also had a regular eel route. He was especially busy during the Christian season of Lent when families did not eat meat on Fridays. During this time, he would take a bright light and spend all of Wednesday and Thursday nights on the mud flats of Jamaica Bay spearing eels. The following morning, he would skin and clean the eels, selling them at three pounds for $1.00. His catch served as the Friday evening meal for many in the Broad Channel community (Mundy Sr. 2010).

Jamaica Bay Livelihoods After 1972

Off of Rockaway Parkway in Queens, behind a crowded International House of Pancakes, lies a small creek-side village, with roads so narrow only one car passes at a time. On some days, as in early November 2010, the tide rises high enough to fill the tiny streets with knee-high water, making navigation through the neighborhood difficult. Tucked away around a corner, on a dock jutting out into Hook Creek, a windswept man in a blue plaid shirt, jeans, and work boots sits on a stump carefully mending mesh wire eel traps. "I have to make all new traps," he says, "since the water quality has improved, shipworms have returned, burrowing into, and rotting out, all of my wooden traps. Look, you can see, it's like a honeycomb," he says, as he snaps a piece of wood over his knee. He demonstrates how the mesh traps, roughly two milk crates in size, work with a little trap door where the eel slides in. "Do you want to see the eels I caught today?" he says, as we lean on hands and knees over the edge of the dock. He turns the wooden handles of what looks like a trap door. As he opens the lid, hundreds of small, greenish eels writhe around in a heap. Then, the "catch of the day;" he empties a knapsack on the back of his truck. An eel, probably 20 to 24 inches long and 3 or 4 inches thick, flops onto the truck bed. "What are you going to do with it?" "Skin it and eat it," he says with a grin. (Conversation with Larry Seaman Jr. November 2010.)

Larry Seaman Jr., age 67, has been catching eels in Jamaica Bay since the late 1950s. "The same as his father. The same as his grandfather. The same as his great grandfather" (Seaman 2000 qtd in LeDuff). His brother, Mr. Bob Seaman, age 60, a Vietnam veteran, returned to the water when he was unable to find work after the war. He now runs the small bait shed adjacent to their house and estimates that he sells only 50 pieces of bait per day and some tackle. Larry Seaman Jr.'s wife, Lois, who died of cancer in 1998, once ran the bait shed. Mr. Seaman recalls that he "worked *for her*," a strong woman of German heritage, who encouraged him to collect eels on days when weather or other unpleasantries diminished his enthusiasm for the job. Mr. Seaman Jr.'s son, Larry Seaman III, age 35, also catches eels and occasionally works as a duck-hunting guide in Nassau County and upstate in the Catskills. The elder Seaman wishes his son would look for work elsewhere and is worried that he could jeopardize his prospects for doing so if he gets arrested for eeling on the Bay. Larry Seaman III refuses to leave the water, "I love being out on the Bay. It is in my blood" (Seaman III, 2010). The younger Seaman also appreciates the opportunity to work with his father. "I wouldn't give it up

for anything. I love it, and I love working with him, you know? There's not too many people who get to work with their fathers" (Seaman III, qtd in Gibberd 2007: pg. 1).

On a good day, the Seamans collect 100 – 200 pounds of eels, averaging about one pound per pot. The Seamans sell their eels primarily to the Delaware Valley Fish Company, a leading exporter of eels, as well as to local bait shops and to a few party boats. Throughout the course of the afternoon, several recreational fishermen also casually stop by to purchase eels from Mr. Seaman directly. Mr. Seaman lifts the lid of his dock tank, putting a few pounds of furiously squirming eels and some water into a plastic bag. His customer takes out some money, handing Mr. Seaman roughly $30, who returns $10 to the man. After some back and forth, Mr. Seaman tells him not to worry about it. Appreciative, the man heads off with his bag of writhing eels for an afternoon of fishing.

Mr. Seaman Jr. explains how his life has changed since the establishment of Gateway in 1972. He recalls the clamorous meetings at Floyd Bennett Field in the early 1970s when hundreds of local residents came to voice their opinions about the pending Park policies. Of most immediate importance to him and his family were the restrictions on commercial fishing and eeling. Mr. Seaman recounts his verbal agreement with Gateway leadership, specifically Mr. Marc Koenings, allowing the Seaman family to continue eeling in the Bay. Mr. Dan Mundy Sr., without prompting, also recalls this agreement whereby the Seaman family would be "grandfathered in" to eel, as long as they were alive and passed the occupation from generation to generation (Mundy Sr. 2010). Mr. Seaman regrets that he did not push the Park Service to put this agreement in writing at the time, saying, "They promised us one thing, and now they are going against it," noting that he "foolishly expected them to keep their word" (Seaman Jr. 2010).

The first twenty years after the Park opened were fine, Mr. Seaman says. He and his family were on a first name basis with Park Police and they allowed him to place and collect his eel pots without trouble. Larry Seaman III recalls the early relationship with Park personnel, stating, "We were like close friends." The younger Seaman goes on to describe how, as a young boy, his father would pull adjacent to the Park Police boat to chat with those on board while Larry III would cross from his father's boat to the Park Police boat to play. Then, in the early 1990s, Mr. Seaman Jr. thinks there was a change in the Park administration, which led to a change in Park policy toward the Seamans and their way of life on the Bay. One of the most noticeable changes, Seaman says, is the rate of Park personnel turnover. "Just as we would get to a point of a working relationship

with someone, they'd yank 'em," replacing them with a new person, unfamiliar with the Seamans and their agreement with the Park (Seaman Jr. 2010). Now, the Seamans say, they are forced to eel while "looking over their shoulders" and are made to feel "like criminals, drug dealers, or smugglers" (Seaman Jr. and III 2010). Mr. Seaman Jr. describes several instances where Park Police boarded his boat threatening to fine him, confiscate his equipment, and arrest him for fishing in federal waters. A 2000 *NY Times* article quotes him, "I guess they must have figured I'd be dead by now. But just for the record, I ain't dead" (Seaman Jr. 2000 qtd in LeDuff).

In addition to the verbal agreement, Mr. Seaman Jr. says the Park's policy against taking horseshoe crabs, which he uses as bait, has significant consequences for his livelihood. He has tried using clams as bait, but says that he would do just as well leaving the traps empty as he does using clams. He explains the state permitting system for horseshoe crabs. There is a quota, usually around 250,000 crabs per year that can be taken from state waters. After that quota has been reached, the state prohibits taking any more crabs. Mr. Seaman Jr. has a couple of problems with this permitting system. First, he says, it gets warmer earlier along Long Island, and so people along Long Island are able to harvest earlier, and thus take more of the allotted supply before the "West-enders" get their shot. Secondly, he says, the high price of conch drives a "gold rush" for horseshoe crabs. Along Long Island people harvest horseshoe crabs, not for their own immediate use, but to make "a couple hundred dollars quick," selling them for $1/piece to people in Virginia and elsewhere for conch fishing. Finally, he says, the "scientific establishment" grossly underestimates the number of horseshoe crabs and the impact that watermen would have on their numbers. "You go down to Barren Island or back behind the Statue of Liberty on a full moon and look along them beaches there, and there's more crabs than you can imagine. Twenty thousand or more piled on top of each other. It's unbelievable. But we don't have no voice. We don't have a college education, we didn't study marine biology, so what do we know?" (Seaman Jr. qtd in Gibberd 2007: pg. 4).

September 11, 2001, also affected the Seamans' livelihood, with increased security around JFK Airport impacting their access to eels. Mr. Seaman recalls the Port Authority boarding his boat, telling him the Coast Guard was waiting for him on shore. When they took him to shore, the Coast Guard arrested him for "breaching a security zone," holding him for eight hours at JFK and threatening him with a $50,000 fine or five years in jail, before eventually letting him go. Larry Seaman III is unhappy with the Port

Authority's post-9/11 prohibition against duck hunting in Nassau County, though he concedes that the restrictions are easing. The Seamans recognize the need for increased security, but think the situation is a bit "absurd," given their longstanding relationship with the Port Authority. Furthermore, the Seamans feel it would be beneficial for the airport to have "guys like them" out on the water; their familiarity with the Bay makes them more likely to notice suspicious activity.

According to the Seamans, besides living in the "Land of No," under the restrictions of Gateway and the Port Authority, economic and demographic change has also impacted their livelihood. Larry Seaman Jr. explains that several of his usual customers, such as Kettle of Fish on Cross Bay Boulevard, have closed, making it more difficult to unload his catch. Similarly, the number of party boats has also declined because of high operation costs and waning numbers on the boats. He notes that Sheepshead Bay has a handful of party boats, but explains that this is Joe Maco's territory and so he does not sell to them. Demographic change in surrounding neighborhoods has also impacted sales. Mr. Seaman Jr. says that there are fewer Italian Americans in the neighborhoods near Jamaica Bay, citing the increasing Indo-Caribbean population in Richmond Hill as an example of demographic change (See Chapter 5). Although the growing Asian population drives demand for eels, Mr. Seaman Jr. has been unable to establish amicable relationships with this group and so does not exploit that market niche.

Today, because of environmental regulations, economic, and demographic change, there are few people making their livelihood directly from Jamaica Bay. A 1996 *New York Times* article reported that only five commercial fishermen remained, the Kirchners (who also trapped muskrats) and the Seamans, all of whom live in Meadowmere, Queens. Seaman Jr. estimates that in the 1960s and 1970s, the Bay supported at least ten eelers, whereas now there are only a handful of people, his family included, who earn their livelihoods from the Bay. He mentions an older gentleman, named John, roughly 82 or 83, who eels on occasion as well as fishing for striped bass. Other "younger fellas," maybe three or four, catch and sell bunker as bait, while another, "Greg," age 50, pots crabs. All of these men, he mentions, ply their trade well before dawn, so as to avoid receiving summons. Mr. Seaman also notes that in addition to these few "legitimate" baymen, there are several "part-timers" who supplement their income, either directly by selling fish to bait shops, or indirectly by consuming fish from Jamaica Bay. Field interviews with other community members in Meadowmere, and with fishermen

at the North Channel Bridge and at Canarsie Pier support this, indicating that there are still significant numbers fishing for subsistence.

Even though the Seamans are one of the last remaining baymen, they too have altered their uses of Jamaica Bay. They eel far less, resulting in significant income loss. Larry Seaman III estimates that they have lost as much as 50 to 75% of their income because they do not eel as much as they did in the past. Although Mr. Seaman Jr. describes eeling as his "first love," he worries about the consequences of getting caught, the fines and legal troubles, and he resents the way authorities make him feel like a "second-class citizen" when "all we want to do is work" (Seaman Jr. 2010). Increasingly, the Semans have been shifting their momentum to Freeport, Long Island, especially during the summer when Jamaica Bay fills with recreational boaters and anglers, to catch green crabs, selling them to bait shops and Long Island party boats. Previously, the Seamans would discontinue their work in Freeport in September, when the kids would go back to school, and return to Jamaica Bay to collect eel pots. Now, water temperatures stay warm later into the year and so the good eeling does not begin until mid-October. November is a particularly good time of year because the eels fatten up before burrowing in the mud for the winter and because eel demand rises with the holiday season.

Mr. Seaman Jr. anticipates that with increasing regulations, economic, and demographic change, their way of life on the water will likely be lost once they stop eeling. Mr. Seaman Jr. argues, "They preserve everything else in the Park, but not the working watermen, who are as much of an asset as everything else" (Seaman Jr. 2010). They point to their knowledge of the Bay, e.g., their familiarity with snow geese and black duck migration patterns, and their Good Samaritan acts, e.g., saving stranded kayakers, as reasons for preserving local watermen. The Seamans also believe that they can come to an amicable agreement with the Park and Port Authority, emphasizing, "all I want to do is work. I don't want nothing from them" (Seaman Jr. 2010). Larry Seaman III describes his friends who go to work every day hating their jobs. Smiling, he says, unlike them, he "loves his life, wakin' up and doing what I do," adding, "I don't want some bureaucrat telling me what I can do, and making me do a job I hate" (Larry Seaman III 2010).

Ultimately, the Seamans think that the Park and working watermen can establish a relationship that would be a win-win situation for everyone. Most immediately, the Seamans would like to see a formal written letter from the Park acknowledging their

verbal agreement allowing them to eel. This way, they say, they can eel without fear of being arrested or fined, saving both themselves and the Park Police a great deal of hassle. The Seamans are not looking to keep the Bay to themselves and suggest a permitting system that would allow watermen to work and the Park to monitor commercial fishing and eeling in the Bay. Mr. Seaman Jr. also proposes a permit for taking horseshoe crabs, which would help curb the "gold rush" for crabs. Furthermore, the Seamans argue, it is "common sense for us to police ourselves. We are not out there to rape and pillage. We're conservationists too," citing the example of lobstermen voluntarily adopting a "V-notch" system to indicate female crabs with eggs. Neither do the Seamans want to chase out birders or others using the Bay, noting that they have a right to watch the birds and recreate too. Larry Seaman III suggests a compromise in the permitting process that would prohibit commercial fishing and eeling on the weekends, leaving this time for the "special interest groups" (Seaman III 2010).

In addition to the "legitimate" fisherman or working bayman, there remain several small industries – similar to those of the late 19th and early 20th centuries – that serve as a livelihood source for local populations. For example, several bait shops remain along the Bay. The bait shop at the Beach Channel Marina on Beach 59th street in Far Rockaway serves boaters as well as nearby anglers, many from the Hammel and Red Fern Houses, who fish for subsistence. The Cross Bay Bait and Tackle shop also serves local anglers in Howard Beach, many of who fish from the nearby North Channel Bridge. Similarly, the Beach Channel Marina, the Sunset Marina in Broad Channel, the Gateway Marina in Brooklyn, and the Gerritsen Beach Marina employ community members as well as selling refreshments and providing storage and maintenance services to Jamaica Bay boaters. Several party boats run out of Jamaica Bay, taking people for a day of fishing either on the Bay or in the waters beyond Rockaway Inle. Local charter boats include Captain John McMurray of One More Cast Charters, Captain Ralph Burdis of Island Charters, and Captains Frank Crescitelli and Dino Torino of Fin Chaser Charters.

Traditional livelihoods, such as oystering, clamming, and eeling have declined throughout the Bay because of industrial pollution and new regulations. However, the Bay continues to sustain a smaller community of individuals who earn their livelihoods around the water. Livelihoods have shifted away resource extraction, such as fishing and hunting, and industrialization, e.g., Barren Island offal factories, and turned back

toward livelihoods oriented around recreational uses of the Bay, harkening back to Jamaica Bay's resort-era of the early 1900s. As water quality improves and the popularity of water recreation rises, traditional boating and fishing shops will likely return as well as a rise in businesses that cater to contemporary recreational activities, such as kayaking, paddle boarding, and wind-surfing shops. Furthermore, with improved water quality and changing neighborhood demographics, it is likely that more people will try their hand at supplementing their diets, or their incomes, from the waters of Jamaica Bay. Consequently, although some examples of traditional livelihoods persist along the Bay, albeit in slightly altered form, new opportunities for earning one's livelihood from the Bay continue to arise.

Jamaica Bay Recreation

> A pleasant ride of fifteen or twenty minutes through cultivated land and thriving hamlets, and the terminus of the line was reached, at the Bay View House, Canarsie. In front of this hotel, facing Jamaica Bay, were a number of rustic shelters, with settees and a table beneath their welcome shade, where quite a throng of people, of both sexes and all ages, were enjoying the delicious breeze which swept in from the sea, and ruffled the surface of the bay…Here upon comfortable seats the visitor can watch the ever changing panorama on the bay. A perfect fleet of yachts designed for fishing parties lay snugly at anchor last evening, and a myriad of smaller boats dotted the water round the shore. There were not less than two or three hundred boats riding gracefully at anchor, forming a very pretty site. In the daytime, however, nearly all of these are out during the Summer, for Canarsie is a great place for fishermen.
> – *Brooklyn Eagle* July 27, 1882.

Scenic views, fishing, and boating are some of the primary recreational activities that have drawn crowds to Jamaica Bay since the middle of the 19th century, when declining work hours throughout the country and increased transportation to and from the Bay brought larger numbers of recreational visitors as well as yearlong residents. An 1882 description of Canarsie shows the popularity of Jamaica Bay's resources for attracting people to the area. "A delightful breeze was blowing, and the air was stimulating and refreshing…Others lingered on the hotel plaza and opened their lungs for the breeze, which was like the balm of Gilead to the tired and weary emigrant from the 'land of bricks and mortar'" (BK Eagle 1882). Similarly, an 1896 *NY Times* article arguing for the benefits of a Bay-side resort over an ocean-side resort states, "Nothing has been said as yet about the nature of the bay's attractions. The most important one is healthfulness.

The salt air which one meets upon the meadows is not the sharp, penetrating air of the ocean. It is a soothing air, and is said to be a sure preventative and remedy for malaria" (1896).

Other open-space recreational activities, such as swimming, hunting, and picnicking, were also popular in Jamaica Bay. Still-water bathing in Jamaica Bay provided an alternative to the rougher ocean waters. In 1915, the Jamaica Bay Yacht Club sponsored the quarter-mile Metropolitan Championship Swim in Jamaica Bay. In 1925, the Broad Channel Baths opened on the southwestern tip of the island on a site that was formerly a stream (Hendrick 2006). However, by 1927, the Health Commissioner deemed Jamaica Bay unsuitable for swimming, and health officials have continued to advise against swimming in Jamaica Bay. Reports of drowning in Jamaica Bay throughout the 20th century, however, indicate that people continued to swim, despite advisories against doing so. Hunting and trapping were also popular activities in the marshes along the Bay's fringes and in the interior islands of the Bay. "Day after day, men armed to the teeth, and with the vision of wall filled game bags before them, leave Canarsie and sail through the marshes of the Bay in search of game. If they hunt on bars or islands, or the edges of the Bay they may got a few birds, but afternoon gunners, as a rule, are not overloaded with game" (*BK Eagle* 1877). Nearby groups and clubs also used the Bay's islands for picnicking and parties. For example, the *Brooklyn Eagle* describes the Canarsie Turtle Club's annual event on Ruffle Bar, an island in the Bay. "Excursionists reached the island, and after breakfasting, indulged in quiot pitching, dancing, jumping, base ball, foot ball, swimming, and boating" (*BK Eagle* 1899).

Improved transportation to the area in the late 1800s also brought larger numbers of recreational anglers to the Bay, with an 1890 estimate of 500 to 1,000 recreational anglers per day (Olsen N/D). In 1893, there were four fishing stations along the railway where there had been none just a decade before. At the stations, recreational anglers could rent boats and guides for a day of fishing. "On a good Sunday, not a boat is to be hand. They are all hired out to the amateur fishermen. Jamaica Bay is the only stream of water in New York State in which it is legal to fish on a Sunday…The legislature two winters ago having passed a bill to that effect" (BK Eagle). The Goose Creek station was particularly popular for weakfishing (Hendrick 2006). A 1900 *BK Eagle* article, headlined "Where Weak Fish Abound" explains the appeal of Jamaica Bay for recreational fishing.

> Once a week fisherman always the same, and thus it is that each season of angling sees many old time faces, hardened and seamed in sport, gather at the favorite runways. Jamaica Bay offers inducements not possessed by more open water of NY Bay. Boats are cheaper, bait is cheaper and probabilities of success are greater…From any of these places [fishing stations] a roomy and flat bottomed boat, the only kind used on the bay, can be hired for an afternoon or the whole day at a uniform price of 50 cents for week days and 75 cents for Sundays. For $1.50 extra, the novice can secure the services of a bayman, who will row the boat, bait the hook, prepare the chum and proceed to a spot where fish are caught, and will in a general way, impart information which couldn't be had any other way practically for forty times the money.

Although many likely relied on the weakfish, fluke, blackfish, flounder, and striped bass to supplement their diets, it is equally likely that many engaged in fishing for the pure joy of being out on the water. An 1893 *Brooklyn Eagle* article observes, "There must be something in fishing which makes men good natured, for quarrels and fighting are never heard of on the bay." Another Brooklyn angler captured his sentiments about the Bay with a poem:

> When care and noise oppress me,
> And politics make me sick,
> To the woods I go like a bumblebee and whittle me a bit of stick.
> And when I have it whittled fine, on the end I ties a string,
> And then this lovely fishing line in Jamaica Bay I fling.
> Then the fool-fish come to meet their fate, when the bay is soft and calm.
> And gobble me bait so clane and so nate –
> Shure I always fish with calm.
> *Brooklyn Eagle* June 1, 1902.

Along with fishing, boating has been a long-time recreational activity in Jamaica Bay. Yachting was especially popular, and during the late 1800s, several yacht clubs dominated the sport in Jamaica Bay, hosting organized races throughout the season (Hendrick 2006; Olsen n/d). Jamaica Bay's depth, its placidness, and its proximity to New York City and several nearby hotels made the Bay a popular regatta site. "The present yachting season on Jamaica Bay has been unusually active, and the interest in aquatic contests bids fair to hold out until cold weather puts a stop to the sport. New boats are being continually added to the fleet on the bay, and almost every week there are interesting sweepstake contests or match races" (*NY Times* 1888). The article goes on to note that an upcoming race will likely draw large crowds and be one of the major events of the Canarsie season. In the 1900s, motorboats, which could be rented for $3 per day, became increasingly popular among the yacht clubs, the oystermen, and the

pleasure boaters of Jamaica Bay (*BK Eagle* 1902; Olsen).

Image 4.1 Jamaica Bay Yacht Club *New York Times*

In the 1920s, the Yacht Racing Association of Jamaica Bay combined several clubs in Jamaica Bay, including the Rockaway Point Yacht Club, the Canarsie Yacht Club, the Jamaica Bay Yacht Club, the Old Mill Yacht Club, the Midget Squadron, and the Broad Channel Yacht Club. Yacht clubs commonly served as a center for social activities, hosting parties, parades, and other maritime outings (Hendrick 2006; Rkwy Pt Yacht Club History). During the war years, boating on Jamaica Bay slowed because of gasoline shortages (Rkway Yacht Club), but power boating increased in popularity again after World War II (Olsen).

Although early plans to develop Jamaica Bay into a "Venice by the Sea" failed to materialize, Robert Moses moved to secure Jamaica Bay's fate as a recreation site in 1938 by incorporating Jamaica Bay into the New York City Parks Department. Additionally, local real estate, once gobbled up by eager developers, was sold off in pieces for residential development as the prospects for a "grand port" or summer resort diminished. Consequently, the area underwent a slow transition from summer resorts to year-round residential communities. In the 1950s, Robert Moses furthered his plans to convert Jamaica Bay into a recreational site by establishing the Jamaica Bay Wildlife Refuge, under the care and guidance of Mr. Herbert Johnson of the Parks Department. In 1972, the City transferred ownership and control of most of Jamaica Bay and its

interior islands to the National Park Service in an effort to bring the National Park experience to urban residents (Kornblum 2002).

Contemporary Jamaica Bay Recreation

Recreation, including open space activities, scenic views, fishing, and boating, in and along the Bay has played an important role in developing attachments to the Bay and in creating a way of life oriented to the water. Ms. Barbara Toborg, of the Broad Channel Historical Society, says, "It is a nice place to raise kids because they can play in the streets and because they have boating, they have swimming. Some people have been here for generations – 3 and 4 generations of Tupperdys, Otts, of Mundys; there are some families that go back a lot" (Toborg 2010). The long-time associations with the area are a point of pride and sometimes jokes. "I've only been here for fifty years, so I'm not an old-timer yet" teases one long-time resident (relayed by Mundy Jr. 2010). Mr. Dan Mundy Jr., President of the Broad Channel Civic Association, notes that newcomers are increasingly drawn to the area because of the Bay and its surroundings[2]. He believes that access to water recreation, coupled with affordability, is a driving factor in most residents' decision to live around Jamaica Bay (Mundy Jr. 2010). Mr. and Mrs. Toborg's experience moving to Broad Channel in 1985 supports Mr. Mundy Jr.'s hunch. "We could afford it. We had to move out of our apt in Middle Village. Barbara knew the school crossing guard, who was from Broad Channel. This house came on the market. She brought us an ad from the *Wave*. We knew the Refuge. We had gone to the Refuge before. Broad Channel always looked seedy and dingy. It [their house] was on the side street and it was a double wide. We looked out the back and saw this [open marsh grass]. We didn't look at another house. We've never regretted it either" (Mr. Toborg 2010). Mr. Mundy Sr. describes how many in Broad Channel entertain their "inland and upland friends" with backyard barbeques and sightseeing trips around the Bay, showing non-Channelites the charms of island living – the houses, marshes, and the birds.

Since the establishment of the Jamaica Bay Wildlife Refuge in the 1950s, bird enthusiasts have frequented the site to catch a glimpse of migrating flocks or for views

2 Residents of Broad Channel paid ground rent to the City until 1980. Many feared the City would kick them off the island. Mr. Dan Mundy Jr. says, "When I was a kid before bed, my mother would tell us 'say a prayer that we don't get kicked out of here' because [Mayor] Lindsay was trying to kick us out. . .So the houses were worth little because they didn't own the land and could be kicked off at any time." Once the City sold the land to the Broad Channel community, housing values increased, prompting some families to leave, allowing newer people to move to Broad Channel (Mundy Jr. 2010).

of the Manhattan skyline. Mr. Jim Ash, formerly of Howard Beach, recalls foreign tourists hurriedly traveling to see birds at the Refuge after landing at JFK and before catching their connecting flight. He also recalls his own enthrallment with the Refuge. As an adolescent boy, his aunt gave him a *Peterson's Guide to Birding*. "Most birders," he says, "can tell you a story of their 'hook bird,' the bird that really got them into birding." He recalls seeing his "hook bird" at the Refuge, a glossy ibis, noting that it had been "only three years after the ibis began appearing in New York City." Mr. Ash adds that birding "offered me everything that hunting and trapping on the Bay had provided, but without the killing…Birding allowed me to engage with nature in an in-depth fashion" (Ash 2010). After seeing his "hook bird," Mr. Ash went to the Refuge almost daily before moving to Long Island in the early 1990s. Ms. Barbara Toborg also conveys the importance of the Refuge to local communities for bird watching and for other open space opportunities. Many, like her and her husband, visit the Refuge just to be outside. Mr. Fred Toborg quips, "I don't consider myself a bird watcher. More of a bird 'looker-at-er.' We don't take it so seriously that we have to keep lists and check them [bird sightings] off." Ms. Toborg continues, "I think we're more generalists – just being out in nature, all the stuff. [We] appreciate it [the Refuge] as part of a larger being outside; we want to enjoy all of the outdoors, not just the birds." In addition to using the Refuge for open space recreation, Ms. Toborg says that several Broad Channel folks have worked at the Refuge, either as employees or as volunteers. Additionally, she explains that the community utilizes the Refuge as a meeting space and for cultural events, such as painting, photography, haiku or poetry readings, lecture series, and thus, as a source of entertainment.

Swimming and visits to the inner islands of the Bay also continue to be important open space activities for local communities. Several people report that local kids swim in the Bay throughout the summer. Ms. Toborg describes one local swimming spot for kids, equipped with a diving board, over the sluiceway off Cross Bay Boulevard. She observes that people swim despite the advisories against it, noting that some people do not know about Combined Sewer Overflows (CSOs), while others, particularly local mothers, discourage their kids from swimming after rainfalls. Others continue to take their boats out to the islands dotting Jamaica Bay. Mr. Mundy Jr. describes his neighbor who goes out to the islands several times per week. "My neighbor over here goes out 3 or 4 times per week. He has a little boat, only goes 5mph; he likes it that way…A lot

of times he goes out there and looks at things that have washed up after the storms, different wrecks and stuff. People definitely enjoy walking around the perimeter of the islands" (Mundy Jr. 2010). Mr. Mundy Sr. describes visits to the islands as a "very important traditional use of the Bay. It is almost a religious thing that everybody has to go out there [parts of Little Egg Marsh and Ruffle Bar] during the summer and stop by the island and take a walk along the edge, or if it's the weekend, to meet other people and bring a picnic lunch, sit on a blanket for the afternoon and let the kids run around and swim, and spend an afternoon out there" (Mundy Sr. 2010).

Besides swimming and picnicking, recreational and subsistence fin fishing – both hook and line and spear fishing – and crabbing continue to be important activities to people of all ages throughout the Bay. "Brian," a middle-aged gentleman from Meadowmere Park, says that although he thinks there is little, if any, commercial fishing left in the Bay, most members of the small community continues to fish and crab for fun. He describes a pleasant afternoon on his boat catching a few crabs, having a "crab boil" and some beers right up on the beach. A leery, younger acquaintance squirms at Brian's story, saying he fishes primarily for fluke and striped bass, but that he surely would not eat anything he catches (Field Interviews 2010). Anglers at Canarsie Pier and along North Channel Bridge, when asked about consuming fish from contaminated waters, say that pollution matters little when there are "empty bellies" (Field Interviews 2009). Mr. Mundy Jr. enjoys spear fishing and says there are others like him, most notably "old-timers" in Rockaway who spearfish from the jetties and have been doing so for 50 to 60 years. Killi catching has long been an activity for kids living around the Bay. A community member posted a message on a Howard Beach website, saying, "I was born in the Beach in 1946…I love to hear about how it was back then when we all used to go 'killying in the creek" with a milk bottle filled with bread and tied on a heavy string. We then used the killis for bait to catch blue-clawed crabs. Those were the days!" The practice continues today in Broad Channel, according to Ms. Barbara Toborg, who says that on days of extremely high tides or storm events, local children wade in the streets to catch the tiny baitfish.

Boating, in various forms, continues to be one of the most common and enjoyed water recreation activities in the Bay. Today, there are several yacht clubs that continue to host regattas on Jamaica Bay as well as parties, brunches, sailing lessons, fishing and kayaking tournaments, and beach clean-ups. Several yacht clubs have member websites

that facilitate information sharing on boating and fishing. Contemporary yacht clubs include, but may not be limited to, the Deep Creek Yacht Club, the Rockaway Point Yacht Club, the Midget Squadron, the Belle Harbor Yacht Club, the Old Mill Yacht Club, and the North Channel Yacht Club, Riley's Yacht Club in Hamilton Beach, and the Howard Beach Motor Boating Club. Besides the yacht clubs, the Sebago Canoe Club, of Paedergat Basin Park in Brooklyn, is a group of local kayakers, sailors, rowers, canoeists, and flat-bottom racers who consider the waters of Jamaica Bay "home." The Sebago Canoe Club has a long history out on the water, dating back to 1933, as this entry from its web site confirms:

> The SEBAGO CANOE CLUB is in Paerdegat Basin Park in Brooklyn, New York, a short paddle from the 16,000 acre expanse of Jamaica Bay. The Bay is part of Gateway National Recreational Area and has miles of open water with salt marshes, islands, beaches, and a famous wildlife refuge. It is common for boaters to see Oystercatchers and Black Skimmers flying over the water while Snowy Egrets and Great Blue Herons patrol the shoreline. Sebago, founded in 1933, is one of the oldest canoe clubs in the Northeast and our clubhouse stands on an acre of land that was once a summer encampment of the Canarsie Indians. Our canoe club was originally based on Lake Sebago in Harriman State Park where we continue to maintain rustic cabin facilities as part of the American Canoe Association camp. Sebago Canoe Club is open year round to its membership and by appointment to those interested in membership. We welcome anyone interested in the wide range of paddlesports. Contact our Membership Chair for more information. (http://www.sebagocanoeclub.org/his.html)

Sebago members were active supporters of Gateway at its inception. They testified on many occasions at public meetings in favor of the Park Service mission to protect and enhance Jamaica Bay resources and continue to do so. The club – with over 220 members – is an example of a longstanding Jamaica Bay association that continues to introduce new generations of local residents and people from more distant communities to the bay's environment. It teaches skills that are essential to close involvement with bay resources and its members continually participate in clean-up and environmental monitoring efforts. The club's leaders are out on the bay all the time and are examples of bay people with profound cultural attachments to the bay's resources.

Community members also recreate on Jamaica Bay from their private boats. One individual, a former board member of the Old Mill Yacht Club, fondly remembers taking his kids out on Jamaica Bay, "building" flotillas with roughly five or so other boats, spending the entire day swimming, fishing, grilling, and eating out on the Bay

with family and friends. Mr. Mundy Sr. chronicles his adolescence in terms of how far he could go out alone on his boat. At age seven or eight, he says, you had to learn how to swim right away to protect yourself and to "alleviate parents of worry if you fall overboard." Between the ages of seven and nine, Mr. Mundy Sr. recalls, is when every young boy in Broad Channel wants a boat to go out in the Bay. At first, he says, "you only row half way up the canal, making sure you didn't go past so and so's house. A year or two later, you could go further to the end of the canal, but not past the end. . .In your pre-teen years, if you were lucky, you got a small motor for the boat and you would motor back and forth. Finally, as a teenager, you could go out of the canal and out into the Bay and motor into the Bay. You had a little more freedom." He remarks that such experiences are important for children who grow up in the neighborhood because they establish strong connections to the Bay and to the water at a young age (Mundy Sr. 2010).

Mr. Mundy Sr. recalls local concern that their way of life around the Bay, their weekly (and some daily) boat rides, their picnics with friends and family, their favorite fishing spots, would be seriously altered if not eliminated by the establishment of a national park. Mr. Mundy Sr. explains the general sentiment of local populations. "This is our territory. We were here first." At a rowdy planning meeting at Floyd Bennett Field, where it seemed as though locals could riot at any moment, Mr. Mundy Sr. and other community leaders convinced the Park to switch its momentum away from a plan focused solely on wildlife preservation to a management system that conceded "traditional uses of the bay, as experienced at that time, should not be diminished in any way" (Mundy Sr. 2010). Although Ms. Toborg says there may be some lingering resentment about the establishment of the Park, this has largely waned, as community members continue to engage in most of their traditional activities.

Mr. Mundy Jr. says that one of the most noticeable changes on the Bay is the decreased number of people earning their livelihoods directly from the water, noting the elimination of commercial fishing and the declining number of party or charter boats. Beyond that, the Mundys state that some of the most significant changes in the community's use of the Bay stem from technological changes, such as the increased popularity, and ownership of, motorboats. Mr. Mundy Jr. remembers when rowing out to picnic or walk along the inner islands of the Bay was a much larger accomplishment, given the physical exertion necessary for the task, but today, people can motor out there

easily. The Mundys do not believe using motorboats to reach the islands diminishes the special importance people attribute to this activity, but the newer boats do change the way, and perhaps the numbers, of people engaging in this tradition. Mr. Mundy Sr. admits there has been some contention between those using the inner islands for picnicking and walking and Park Police who attempt to prohibit people from using these spaces. He says that people will not "give in" on their use of the islands, and he has, on occasion, had to settle disagreements by showing Park Police the regulations allowing traditional uses. Additionally, personal watercraft, such as jet skis, kayaking, wind-surfing, and paddle boating, have also increased in popularity. Mr. Mundy Jr. recognizes the regulations on the use of motorized personal watercraft, but says that many who use them are confused because the Park does not regularly enforce the bans against them. Finally, Mr. Mundy Sr. notes the increased use of the Bay for educational purposes and the increased role of local community members in resource management (See below).

"People down here are very traditional in that they love the Bay and don't want to see too many changes" (Mundy Sr. 2010). As the President of the Broad Channel Civic Association, Mr. Mundy Jr. does not anticipate significant demographic changes in the area because the zoning restricts development for one to two family houses, and therefore, there are no large multiple dwellings. Noting the transition to individual ownership of the land, he says there been a "bit of an uptick," in the numbers living in Broad Channel, but cites the economic incentives to keeping family sizes small. Ms. Barbara Toborg cites individual home ownership as reason to challenge the idea that Broad Channel remains strictly "Irish or Italian blue-collar community," describing the influx of a few non-European groups and the "gamut of occupations," such as teaching, banking, website development, as well as the more traditional civil service occupations. Mr. Mundy Jr. estimates whereas previously there may have been 90 to 95% of the community working in the civil service sector, the number has declined to roughly 60 or 65%.

Besides demographic changes, the popularity of water recreation continues to increase and the appeal of being on the water extends throughout the year. Mr. Mundy Jr. says it is difficult to predict the changes in water recreation, citing the influx and popularity of kayaking as an example. He describes the appeal of coming home from work and dropping a kayak in the Bay on a calm afternoon or early evening, even in the

winter. Finally, the Toborgs, the Mundys, and community members (at Task Force and Community Board meetings) express concern about, and anticipate changes from, global climate change. Ms. Toborg says that people are increasingly concerned about "how climate change will affect the level of the bay, with increased storms and wave action eroding marshes."

Ideally, community members would like the Park to continue recognizing their traditional uses of the Bay and the importance of water recreation for their way of life. They recognize the need to balance environmental management and enforcement at the same time allowing people the freedom to participate in the various activities that make living near the Bay a special place. One way to develop this relationship more fully, Mr. Mundy Jr. suggests, would be through continued outreach and communication with the communities surrounding and using the Bay and its creeks, marshes, and islands. For example, he suggests implementing more "real time" and "streamlined" communication strategies, pointing to the Department of Buildings real-time website as an example. That way, Mr. Mundy Jr. says, "if we see something, instead of getting worked up about it, we could go on the website and see if they [the Park] are taking care of it," continuing that such a system would be "a more streamline way for back and forth of information" (Mundy Jr. 2010).

Swimming, boating, fishing, picnicking, and birding offer opportunities, not only for people to engage the water, but to spend time with friends and family, generating memories and encouraging attachments to a way of life around the Bay. Recreational activities continue to shape and influence a way of life for Jamaica Bay communities oriented to the water.

Protective Attachments to Jamaica Bay

Jamaica Bay communities have long worked to protect their way of life around the Bay and its creeks, marshes, and islands. Local citizens have organized to oppose the industrialization of the Bay, to improve water quality, to restore and maintain biodiversity, and to ensure that the Bay's natural resources are sustained for future generations.

Opposition to pollution dates back to at least 1875, when local fishermen complained of industrial discharge and strong odors from Barren Island offal rendering facilities. In 1881, "Fishermen threatened to organize an expedition to go to the island and burn down the factories unless the pouring of waste oil and tar into the bay was stopped. They said they would rather go to jail for that than to allow the Barren Island people

to starve them to death by depriving them of their means of making a living." A local fishermen, Captain Miller, continued, "upon fish, oysters and clams in some parts of the bay, it [the tar sludge] is so thick that if you try to eat them you can taste the tar, and in cooking crabs you can smell the tar" (*BK Eagle* 1881).

As populations increased along the Bay and inland, local residents became increasingly concerned about sewage in Jamaica Bay. For example, in 1891, eighty citizens of Flatlands petitioned the Board of Health to prevent the construction of a sewer outlet 1,300 feet long and 4x51/2 feet across the marshland to Mill Creek. The petition estimated that roughly 1.5 tons of sewage would be dumped daily into the Creek, noting, "its current is utterly insufficient to carry off the sewage proposed to be thrown into it from Flatbush," fearing "sewage would be thrown up in solid masses upon the marshes of Jamaica Bay and seriously endanger the health of people in Flatlands" (*BK Eagle* 1891). Following construction of the sewer trunk, locals sued the city for damages to oyster beds; James A. Bailey was awarded $8676 in damages, but the City was able to postpone payments while attempting to remedy the problem. Eventually, in 1915, a judge determined that pollution of tidal waters was "lawful pollution" and therefore, oystermen could not sue the City for damages from polluted oyster beds.

In 1938, Parks Commissioner Robert Moses actively opposed the Department of Sanitation's plans to dump ashes and refuse in Jamaica Bay. Following suit, the Howard Beach Association, Inc., rallied 200 protesters against the proposal, arguing that the plan would "seriously impair the tremendously expensive improvements for park, parkway, and recreational facilities built within the past few years in that area" (*NY Times* 1938). In a letter to the Department of Sanitation, Robert Moses wrote: "I have no desire to get into an extended argument on the subject, but it must be as clear as crystal that the old scheme to make Jamaica Bay entirely an industrial section is just plain bunk. . .I am even hopeful that the waters will be sufficiently purified to encourage swimming, fishing, and boating on a large scale" (*NY Times* 1938).

In 1968, mounting traffic delays at local airports, especially at John F. Kennedy Airport (JFK), prompted Port Authority officials to propose expanding runways across Jamaica Bay to ease air traffic delays. The Sierra Club spoke out against the runway expansion, stating that the plan should be considered "ecological insanity" and offering their services to stop the project "with every means at [its] disposal" (Bryant 1968). Similarly, the President Emeritus of the National Audubon Society said, "Jamaica Bay can

and must be saved. For what good will all the enlargements of our airport and city be, if we destroy all this great area of natural beauty and the life it sustains?" (Buchheister 1969). Hundreds of local conservationists and nearby residents organized a flotilla in Jamaica Bay to protest the airport's expansion. "About 75 vessels moved close to the newest runway, once marshland and now used by huge jets that land and take off every few minutes. The protest, organized by the Parks Council,...included frequent bleats from the boats' horns. From the marinas along the shore, other boats joined the flotilla as it cruised the bay" (*NY Times* 1970). Mr. Jim Ash remembers the JFK expansion project as a "large controversy" that had the "birders up in arms." He recalls the media, particularly the *Mirror* and the *Journal American*, extensively covering the issue. Eventually, he says, "the Port Authority 'cried uncle' because of all the bad publicity," paying for a new Refuge building, tractors, and other tools to "shut the birders up."

Image 4.2 Locals Protest JFK Expansion *New York Times*

Contemporary Protectors of Jamaica Bay

The basis for local environmental concern stems from continued engagement with the Bay, either while recreating, earning a living, or observing daily life in and around their neighborhoods. Mr. Mundy Sr. explains that in Broad Channel, "[There is] always a connection to the Bay. It is 24/7. You can't go anywhere in Broad Channel without seeing the Bay. You're passing right through the Bay. It is a constant reminder." Similarly, his son claims, "There's no way you could have the sense of pulse of what's going on in the bay, as you do with people who live like this, who are in and out there everyday. What I can tell you is what I see out there and what's happening" (Dan Mundy Jr. 2010). Consequently, the Mundys point out, local stakeholders have largely spearheaded awareness of, and responses to, environmental issues in Jamaica Bay, particularly poor water quality and marshland loss.

The confluence of national environmental regulations, the transfer of the Bay to the National Park Service, and local efforts to protect and restore the Bay have brought significant improvements in environmental quality since the early 1970s. Mr. Dan Mundy Jr. points to improved water quality and increasing numbers of species as reason for having a more positive outlook about the Bay's future than he has in years past. Mr. Mundy Sr. believes that part of this improvement stems from increasing community support and participation in restoration projects that protect the infrastructure and resources of Broad Channel. Mr. Mundy Jr. says both long time residents and newer community members recognize the importance of environmental quality and many work to protect the Bay because they believe that open space is increasingly "one of the rarest commodities." Consequently, local residents have established several organizations and participated in several committees to advance the restoration of Jamaica Bay. In 1984, citizen stakeholders organized the Jamaica Bay Task Force (JBTF) to facilitate the incorporation of citizen input in the Park Service decision-making process (NPS 2003). The Task Force continues to meet quarterly to provide their input to the NPS on the current status of the bay and options for improving the bay's quality. More recently, local community members have served as citizen advisors on the Department of Environmental Protection's Jamaica Bay Watershed Protection Plan reviewing panel reports and making suggestions to improve the accuracy and likely success of the plan.

Mr. Mundy Sr. recalls his early efforts in the 1990s to draw attention to deteriorating marshes. Mr. Mundy and several fishermen and boaters who frequent the bay

began noticing deterioration of the Bay's marshlands and documenting the loss with photographic evidence. At the same time, the younger Mundy explains, a 1993 federal mandate prohibited the City's practice of dumping treated sewage sludge 100 miles out in the ocean. After the mandate went into effect, the DEP changed protocol for processing wastewater, which resulted in the release of high levels of nitrogen to the Bay, causing declining oxygen levels and increased marsh loss, according to the Mundys. "How do I know?" Mr. Mundy Jr. asks rhetorically, "well before when you were out in a boat, say, it took seven turns to go through the marsh, and then you realize that the whole front end of it is gone, and you're like 'Didn't I make a sharp turn here before? Am I imagining something here? And then you notice it's [the marsh] breaking through over here. So you are acutely aware of the marshes disappearing" (Mundy Jr. 2010). As kids, he continues, "there was a big stone out there that was half way to the end of the marsh. Now it is entirely exposed. . .How can you deny the spike in marsh loss with the nitrogen jump?" Consequently, Mr. Mundy Sr. started an environmental group, the "Eco-Watchers," to investigate the links between wastewater treatment plants and marshland loss. After contacting city and state environmental agencies, elected officials, the media, and the Park Service and the Army Corps of Engineers, the Eco-Watchers drew sufficient attention to the problem to warrant action on behalf of local and federal agencies. The Eco-Watchers have taken the lead in lobbying and securing funds for marsh restoration projects as well as providing input in the planning process, crucial for a project's success. For example, the Eco-Watchers successfully lobbied for a $9 million allotment to restore Yellow Bar marsh; the final project is awaiting approval from the Army Corps of Engineers. Most recently, years of work with the DEP, the DEC, and the NPS culminated in a 2010 agreement wherein the City would invest an additional $100 million dollars in technology to reduce nitrogen loading by 50%, as well as investing $15 million in marshland restoration.

Local communities often go beyond advocating and fundraising, participating directly in environmental restoration projects. Mr. Mundy Jr. recalls filling his boat with "tens of thousands" of grass plugs, transporting them to Big Egg Marsh, and dragging them from the boat to the marsh for planting. Later, when Mr. Mundy Jr. noticed debris had blown on the restoration site, he went into the Bay and pushed the debris off to "give the marsh a chance." He goes on to explain other, small, but important ways the community contributes to restoration projects, such as identifying and contacting

companies for dredge work and finding local mechanics to repair machinery necessary for the job. Mr. Mundy Jr. explains, "In these times of economic hardship, it is something that is necessary for projects to work…[we] volunteer our time and efforts as captain, boatman, gas and everything to get them out there because maybe the project wouldn't happen otherwise." Currently, Mr. Mundy Jr. has partnered with State University of New York – Stoneybrook to build an artificial oyster reef that would help promote oyster colonization, improve water quality, and encourage habitat revitalization.

The American Littoral Society, the Rockaway Waterfront Alliance, the Fresh Creek Nature Association, and Gerritsen Beach Cares are a few of the other groups who organize beach and marsh clean-ups. Ms. Toborg estimates that one woman, on her own volition, has put in 93 volunteer hours along the East end of the Wildlife Refuge, "starting at the subway trestle and working back to the parking lot. We estimated that she picked up about 3,000 lbs of debris. She's driven to clean-up and she won't stop until it's done. She's in Germany right now or else she'd be there cleaning on a sunny day." In addition to her work at the Refuge, this woman spends most Saturdays with another woman, a Far Rockaway resident, picking up garbage from Norton Basin. On one particular day, the Rockaway Waterfront Alliance (RWA) joined them.

> Today was a great day, RWA kids and teachers came out to do a beach cleanup event. They were joined by two people from Brooklyn and two people from Manhattan. A family from Beach 56 Street and one resident from Rockaway Park came out to help as well. We collected more than 25 bags of debris, a bicycle, a car wheel and a huge pile of garden refuge, and a pile of cement waste and chunks of tar-top. We started to take down one of the three piles of buldozed junk. The group circled the bay up to the sandspit, and took a little time out to study the fish and other fauna. (Norton Stewardship Group www.nbesg-wise.org)

The Norton Stewardship group couples their garbage pick-up with the removal of invasive species, allowing native species to thrive, thereby facilitating natural habitat restoration.

> Doris worked the waterside and I took on the section around the electrical pole. Much crabgrass (90%), it grows really tall, at the base you grab the root and try to get some of that out. It is really funny how these type of plants seem to send a message to the roots, you shake and pull it and then let it go. When you try again in about fifteen minutes a lot of root just seems to have unstuck itself and it comes right out. There were clouds, but no rain, and we got a lot done. As I went out on Sunday, I just caught the park sanitation dumping the lot in the truck. That makes it nice for the rest of the week and it will not encourage dumping as was

done last week.
(Norton Stewardship Group www.nbesg-wise.org)

Organized clean-ups have been one way that local communities raise awareness of Jamaica Bay's environmental troubles and promote participation in habitat clean up and restoration. Local Indo-Caribbean leaders encouraged their congregations to participate in a recent American Littoral Society clean up, taking advantage of the opportunity to introduce several school-aged children to the intricacies of the Bay's ecology. The Mundys are strong supporters of this type of educational outreach and Mr. Mundy Sr. recognizes the need to explore educational opportunities more fully so as to engage younger generations in protecting the Bay. He already speaks at near-by schools about the Bay's ecology and its biological importance, but encourages, and anticipates, expanded educational outreach in the future. Consequently, both Mundys suggest developing an educational facility where kids can learn about the Bay's natural resources before going into the "natural laboratory," seeing real-life examples in Jamaica Bay's waters and marshes.

Information sharing, particularly through a strong web presence, is important for educating local communities about the causes and consequences of the Bay's environmental problems and about opportunities to participate in the environmental planning process. The Jamaica Bay Treebranch listserv, the Jamaica Bay Research and Management Information Network, and community blogs (e.g., Queens Crap, Gerritsen Beach.net) are but a few examples. As a result, many local residents feel more equipped to participate in environmental planning because of their improved knowledge on the subject, and many have subsequently come to expect inclusion and involvement in the process of environmental management. Consequently, when local individuals or groups sense they are being excluded from the process, they feel resentment or a lack of gratitude about their efforts to improve the Bay. Mr. Mundy Jr. says "There are groups around the bay that just by virtue of the amount of energy they put into the bay [you'd think] that the Park would reach out to stakeholders for plans for the Bay in general." Furthermore, Mr. Mundy Sr. believes that the web would be helpful in establishing a coalition of groups around Jamaica Bay to pressure officials into continued restoration and protection of Jamaica Bay's natural resources.

Even with several environmental groups working to protect the Bay, local residents are concerned that inadequate funding may undermine Jamaica Bay's restoration.

The Eco-watchers and the Norton Basin Stewardship Group have both successfully applied for grant money to restore the Bay's ecology. The Eco-Watchers received $100,000 in grant money, allocating $20,000 for an educational exhibit and $80,000 toward oyster restoration projects. Similarly, the US Fish and Wildlife Service sponsored the Norton Basin Stewardship Group's restoration of marshlands and uplands into a Migratory Bird Sanctuary. Local groups recognize the benefits of, and increasing need for, collaboration among funding sources, citing collaboration among academics, corporate sponsors, the Park Service, and non-governmental organizations on oyster restoration projects as an example. However, local groups are concerned that the economic recession and city and state budgetary crises will make it even more difficult to secure the necessary funding for restoration projects.

Sustained funding for restoration projects is especially important given the anticipated consequences of global climate change. Residents are increasingly observing, and concerned about, the strength and frequency of storms and rising sea levels. The Eco-Watchers often spearhead discussion on global climate change at local civic association meetings and many in attendance express their concern about the threats to their way of life on the Bay and for their immediate safety in the event of a severe storm (Toborg 2010).

Given the federal government's role in establishing and enforcing the nation's environmental regulations, community members look to the National Park Service to take the lead on restoration efforts throughout the Bay. Furthermore, many local residents expect the federal government to be more financially capable of funding environmental projects than the city or state. Although this may be a common assumption among residents, most of the individuals involved in restoration efforts believe that Gateway is underfunded relative to other national parks and can appreciate their efforts given these financial constraints. But, in spite of budgetary constraints, local groups feel there are areas within the Park that need improvement, particularly the North Channel Bridge and the Wildlife Refuge.

Members of surrounding communities, local anglers, and environmental groups have expressed concern and responded unfavorably to the remnants of Hindu and Santeria ceremonies, primarily at the North Channel Bridge, but also Plumb Beach (See Chapter 5). The Chair of Community Board 10 feels that cultural education about the Park's regulations would balance the concerns of local citizens and ensure that the

Indo-Caribbean Hindu community could exercise their religious rights (Personal communication March 2010). Others feel that the Park needs to engage in a more aggressive clean-up effort at the bridge and needs to start enforcing fines when education is not working (Toborg 2010; Mundy Jr. 2010). Ms. Barbara Toborg points out that the issue is often raised at civic association meetings and that the Park is slow to clean-up the entire Cross Bay area, but especially the bridge. Mr. Don Riepe of the American Littoral Society suggests dispatching rangers or park police late at night or in early morning hours to issue "courtesy" warnings, noting that sometimes simply having an authority figure present is enough to deter leaving materials (Landor 2008).

The Refuge's reputation as the "jewel" of Gateway leads many community members to have high expectations about its maintenance. Recently, community members have become increasingly disappointed with the Park's efforts to manage the Wildlife Refuge, noting how unkempt paths and overgrown invasives detract from the Refuge experience. Mr. Jim Ash says "The Refuge was established – and the Park assumed – quite a bit of management to make outstanding views without people having to go off the path and trample the vegetation. The Refuge was managed to create optimum visibility without disturbance. Eventually, this maintenance fell by the wayside and was not maintained. Some of the views were obstructed. Initially the Park brought Johnson on as a consultant, but eventually he was embittered and left." Both Mr. Ash and Mr. Don Riepe attribute the problem to the Park Service's designation of resource management to maintenance personnel. At a recent Jamaica Bay Task Force meeting, Mr. Riepe says maintenance managers "want something to look managed and therefore they mow because it looks managed" (JBTF October 2010). Mr. Riepe has recently organized a group, "Friends of Jamaica Bay Wildlife Refuge," to make recommendations for improving Refuge upkeep. A recent newsletter made several suggestions for the Refuge, including, the removal of invasive species, the installation of bird feeders, the cessation of grassland mowing (because it reduces habitats and biodiversity), and the development of the South Pond with a boardwalk and bird blinds (FJBWR vol. 1). Additionally, Mr. Riepe believes that a "good cadre of about 100 active volunteers" is essential given the level of upkeep necessary to maintain the Refuge (JBTF October 2010).

Ideally, individuals and groups who view themselves as "protectors of the Bay" would like to develop a relationship with the Park that acknowledges and respects residents' understandings of the Bay and incorporates citizen input and perspectives as part

of its institutional approach to managing the area. Most of those involved with restoration efforts in the Bay express the need for improved communication between the Park and local communities, arguing that this suggestion is especially warranted given the improvements in communication technology. Mr. Mundy Jr. points to the efficiency of several city agencies who use technology to facilitate citizen outreach, such as the Buildings Department and the Police Department. He suggests a system similar to New York's "311 hotline" where Park users could report complaints or make observations and receive a confirmation number to follow-up on the Park's progress in addressing the issue, where warranted. Mr. Mundy Sr. recommends the Park designate a community liaison to attend local meetings, including community board and civic association meetings, to update the public on the positive accomplishments and progress in the restoration process, as well as providing an opportunity for local community members to "blow off steam and have a voice." A community liaison would be in the position to bring people's feedback to the Park, serving as a more direct channel to the authorities that effect change.

Local groups believe that improved communication is especially warranted given the difficulty of navigating a daunting federal bureaucracy. Community members often consider the Park's bureaucracy an impediment to environmental restoration and community resource management, believing they have made "valuable suggestions" for improvement, only to find that the Park will not allow or facilitate the project, citing a myriad of rules and regulations against taking action (Ash 2010; Mundy Sr. 2010; Mundy Jr. 2010; Field Interviews 2010). Furthermore, community members express concern that the planning process will be marred in bureaucracy, resulting in changes or development of areas without community input. Mr. Mundy Jr. worries that the final plan will not fully incorporate community input because of a gap between the initial stages of public comment and the final plan. He suggests incorporating public review throughout the process as well as improving communication with the public to facilitate opportunities for additional community input.

Jamaica Bay has a long history of people working to protect the areas where they live, work, and play. These "protectors of the Bay" have emotional attachments to the area as well as a material interest in the Bay's environmental restoration, having invested time, energy, and money into environmental renewal. Therefore, community members expect that the Park will develop strong community partnerships that acknowledge and

respect their efforts. The numbers concerned about the Bay and working to restore it will likely increase with growing environmental awareness, with rising popularity of water-based recreation, and as information about the Jamaica Bay situation proliferates. Consequently, the Park has an opportunity to benefit from the passion of local community members to sustain Jamaica Bay both materially and socially.

Conclusion

The Jamaica Bay way of life is steeped in socio-cultural traditions built around people's working, recreating, and protective relationships to the Bay, which date back to the earliest settlements in the area. These relationships, however, have also been modified because of new generations, new technology, and new forms of management. The longevity of these modified socio-cultural traditions, rather than diminishing in ongoing significance or importance, are likely to expand, as the traditions are passed to new generations and as new demographic groups participate in working, recreating, and protecting the Bay. The new faces and new dimensions of the Jamaica Bay "way of life" provide new possibilities to ensure that the people of the Bay are not a vanishing culture, just a slightly different one.

Chapter Five
Religious Congregations, Ritual Uses of Jamaica Bay Resources

This chapter inventories and assesses the way religious congregations in the Watershed have traditionally used resources of Jamaica Bay. It also explores how these uses are changing as the communities which sustained older congregations are experiencing demographic shifts. Special attention is given to newer population groups that are encountering Park Service management of Jamaica Bay Resources as they attach their own religious significance to bay resources. Members of Hindu congregations are a particularly important group in this regard, as are practitioners of various forms of Santeria or derivations from African (particularly Yoruba http://www.photius.com/religion/yoruba.html) religious beliefs and rituals.

When Gateway began managing the resources of Jamaica Bay in the early 1970s, there was a distinct religious ecology around the bay composed primarily of Roman Catholic. Jewish and Protestant congregations. This ecology is changing in ways that has direct impact on uses of the bay. The term religious ecology refers to the spatial organization of religious practice in the congregations of residential populations (Orsi, 1999; Stark and Glock, 2008)) Neighborhood churches serve families and households who seek to be within walking distance of their religious institutions. Larger regional churches and synagogues depend on membership that extends over multiple neighborhoods and communities. The Allen A.M.E. Church, discussed in Chapter 2, is an example of an important regional congregation and church in the Watershed. The Catholic Churches of Breezy Point and Broad Channel (St. Virgilius), which have played critical roles in maintaining the cohesion and culture of these village enclaves for generations, are examples of neighborhood congregations in the Watershed's religious ecology. St. Francis De Sales in Belle Harbor, which became the lead institution in response to disaster in western Rockaway, serves a larger community and regional congregation. Jewish congregations, which are among those that have had specific ritual uses of bay resources in the past, also range from large congregations in well-established synagogues, to small groups of worshippers who meet in private homes. In this chapter we trace important changes in the religious ecology of the Watershed as these have had impact, especially, on Jamaica Bay resources under Gateway management. In other words, the chapter focuses primarily on religious groups have sought permits from Gateway's Jamaica Bay managers, or where their practitioners have been appearing in more ad hoc fashion to

perform religious rites in and around the bay.

A Changing Religious Ecology

Demographic inventory and analysis in Chapter 3 showed that since the 1970s there have been significant declines in the homogeneity of older white ethnic neighborhoods surrounding the Bay, especially in Canarsie, Howard Beach, Ozone Park, and East New York. Even in western Rockaway, where the older religious ecology of Roman Catholic and Jewish congregations continues to thrive or at least hold its own, there have been increases in population diversity, bringing in more foreign born and Spanish speaking populations. But the most dramatic religious hanges at the local level over the past decade or two appear to have occurred in Canarsie, Borough Park, and Ozone Park, where again and out-migration have reduced older Jewish congregations. (cite the article in CanarsieNewcomers in these communities tend to be of Hispanic or Guyanese and East Asian origins In Borough Park as in the eastern Rockaways, there have been important shifts from more liberal to more orthodox Jewish congregations. The Jewish congregations of Canarsie have been disappearing, while the very orthodox congregations of Borough Park have been experiencing almost exponential growth. When religious groups seek permits for use of public lands and facilities in and around Jamaica Bay, or when congregants simply appear along the shores of Jamaica Bay to engage in religious rituals, it is helpful for park managers to be able to situate these practices in the larger religious ecology of the region. Since the religious culture of the new and quite large Hindu population of the Watershed results in new demands on Gateway resources at Jamaica Bay, we turn our attention first to the origins and exercise of their attachments to the bay.

Hinduism in Jamaica Bay

Hinduism is one of the oldest religions and the world's third largest religion, with 14% of the world's population adhering to the faith. The following information provides context for understanding the situation of Indo-Caribbean Hindus who have migrated to New York City and who practice their faith along the shores of Jamaica Bay. This section first provides background on Hindu spirituality before detailing the history of Hindu migration to the Caribbean region and then to New York City. Finally, this section discusses the specific experiences of Indo-Caribbean Hindus, particularly Indo-Guyanese, in and around the Jamaica Bay Catchment Area. For a more in-depth

discussion of general Hindu beliefs and traditions, see Flood 1996; Fowler 1997; *What is Hinduism?* 2007.

Hindu Spirituality

Unlike Judeo-Christian religions, Hindus do not believe in any specific starting point or date of origin for their religion; there is no fixed moment of creation or final catastrophic destruction (Chapple 1993). "I am both its origin and dissolution" (Bhaarad Gita). Some have argued that an Aryan invasion in 1500 BCE brought the practice of Hinduism to India, but religious scholars and anthropologists are increasingly rejecting this argument, citing archaeological and DNA evidence to the contrary. Archaeological evidence traces the presence of Vedic rituals, commonly used in Hindu practices, to the Indus Valley Culture of 3500 to 1800 BCE. Thus, some contemporary Hindu scholars (Frawley 1991) argue that Hinduism originated out of the Indus Civilization, who migrated in 2000 BCE after the Sarasvati River dried up, to North and Central India, along the Ganges River.

Hindu written tradition first appeared around 600 to 300 BCE (*What is Hinduism?* 2007). There is no single Hindu text, but rather a collection of Hindu scriptures, of which the primary authority is the Vedas. The Vedas pay homage to the elemental forces of earth, water, fire, and air and impart the message that all Reality is the embodiment and source of the three ultimate values of truth, goodness and beauty (Chapple 1993). The Upanishads are the most widely known part of Vedas, which provide the general philosophical foundations of the faith. Another key spiritual text, Agamas, provides the specific details of worship, e.g., yogas, mantras, and temple building. The secondary scriptures are known as *assmirti*, with the most important known as the Itihasas, which detail Hindu dramas and history, specifically Ramayana and Mahabharata, the most popular of which is the Bhaarad Gita. Finally, the Puranes contain sacred history and mythology.

Hinduism has no single religious authority, such as a prophet, and is viewed as a "family of many different faiths that share essential practices and characteristics" (*What is Hinduism?* 2007: xi). Hinduism's diversity often leads to its misclassification as a polytheistic faith (belief in many gods). Yet, Hindu belief is more correctly classified as henotheism, which accepts the existence of one god, the one Supreme Being, without denying the existence of many gods or alternative forms of the Supreme Being. Each denomination identifies a primary deity, which devotees believe is synonymous with Brah-

man or the One Supreme Being. Today, the four major denominations of Hinduism or lineages are Vaishnavism, Sivaism, Shaktism, and Smartism (*What is Hinduism?* 2007). Most urban Hindus practice either Vaishnavaism, where Lord Vishnu is the ultimate deity, or Sivaism, where Shiva is the ultimate deity. The Indo-Caribbean population of New York, generally, practices Sivaism, where Shiva serves as a "super god" in the faith (Veerapan 2010). Outside of one's main deity, devotees select their own Ishta Devata or a god or goddess who appeals to an individual's needs or sensibilities. Hindu gods and goddesses are similar to Christian angels. Naidoo Veerapan, of the Federation of Hindu Mandirs, likens a person's Ishta Devata to a "main guest of honor." A person's Ishta Devata normally takes a prominent place in the home alter and will be larger or more grand than the other pictures and statues in the home. Mr. Veerapan explains that the Isha Devata choice is a personal choice and is not of concern to other Hindus and, therefore, is not a source of conflict between Hindus (Veerapan 2010). Popular Indo-Caribbean gods include Durga (Mother Kali is also a form of Durga), Lord Ram, Mother Ganga, Lord Ganesh, Lakshimi, Hanuman, and Krishna, who is popular among current generations (Veerapan 2010).

Despite one's denomination or Ishta Devata, God or Brahman is both transcendent, beyond the human physical plane, and immanent, or inherent in everything. God is a pervasive reality that animates the universe and exists in everything, guiding the evolutionary processes of Earth. Each denomination or lineage holds four essential beliefs in karma, reincarnation, the all-pervasive Divinity, and dharma (*What is Hinduism?* 2007).

Karma is the belief in the universal principle of cause and effect; for every action there is an equal reaction. Karma is the totality of one's actions, where one earns rewards and punishments. Reincarnation is the belief in the cycle of birth, death, and re-birth. Hindus believe in the immortal soul that exists beyond death of the physical body. The belief in reincarnation eliminates the fear of death for devotees. The current life is but one step in the long, spiritual journey to *moksha* or oneness with God, which is likened to "a river returning to its source, the sea, and becoming one with it" (*What is Hinduism?* 2007: xix). Reincarnation ceases when karma is resolved, that is, when God is realized and liberation attained. Hindu belief in the all-pervasive Divinity is hailed in the sacred texts of the Upanishads. God is pure consciousness, existing everywhere in time and space and of infinite intelligence and power. Dharma is the mode of con-

duct most conducive to spiritual advancement; it is the guide for piety and ethical practice (*What is Hinduism?* 2007). Therefore, Hindus strive to lead productive, ethical lives, aspiring to make spiritual progress, while pursuing their family and professional goals (Naidu 2010; Veerapan 2010; *What is Hinduism?* 2007).

The Hindu belief in God's immanence and their traditional relationship with the riverbanks of India has led Hindus to revere natural features and resources, viewing them as possessing individual spirits or *jiva* (Chapple 1993; Kinsley 1991). The same forces responsible for the composition of the universe are also present in the human body. Thus all things with form (*saguna*) are seen as extensions of a universal consciousness or ultimate Reality; there is no separation between humans and non-humans (Chapple 1993). Hindu sacred scripture provides the basis for these beliefs, detailing how nature serves as the sustaining force of life on earth. The Vedas evoke mercy for the elemental forces of nature, and the Regveda begins with an invocation to Agni, the fire god, followed by a discussion on the importance of seasonal change (Bai 1998).

Indentured Servitude in the Caribbean

From 1838 to 1917, nearly 400,000 Indians were transported from India to the European colonies of British Guiana (now Guyana) and Trinidad as indentured laborers on sugar plantations (Jayawardena 1963; Bacchus 2010; Naidu 2007). Most of the Indians transported were Hindus (83.6%), primarily of lower castes (roughly one-third were "untouchables") and primarily from the North Indian provinces of Uttar Pradesh and Bihar, with a minority coming from the Southern province of Tamil Naidu (Jayawardena 1963). Roughly 240,000 were sent to Guyana and 140,000 sent to Trinidad. While some were able to secure their return to India as part of their labor contracts, many (roughly two-thirds) were forced to stay in the Caribbean and went on to become farmers, entrepreneurs, and professionals (e.g., teachers) (Jayawardena 1963; Melwani 1995; Naidu 2007).

Unlike India where the caste system continued to hold sway, in the Caribbean, the caste system lost significance for organizing social life. Once Indians left their homeland to cross the *kala pani* or the "dark waters" of the ocean, they were considered "impure" or "contaminated" and lost their caste status (*Bacchus* 2010; Naidu 2007). Close proximity to members of different castes on the boat, and the poor conditions, both on the boats and on the plantations, led to the development of a common "Hindu" identity vis-à-vis their oppressors, and the declining significance of caste in Indo-Caribbean cul-

ture (*Bacchus* 2010; Naidu 2007). In Guyana, after the end of slavery, the Afro-Guyanese migrated to urban areas and the newly arrived Indians found themselves at the bottom of the social hierarchy, with Anglo, African, Portuguese, and then Indians; thus caste struggle gave way to a new racial hierarchy (*Bacchus* 2010). Originally, Hindi was the common language among Indian indentured laborers, but many adopted English to increase their chances of mobility in Guyanese society, eventually forming a "creolized" or "transcultural" West Indian or Indo-Caribbean identity (Bacchus 2010; Naidu 2007).

Although Hindus were allowed to practice their religion in their new land[1], Hindus relied primarily on their memory of Hindu texts and rituals to guide their religious practices, with some assistance from the few Brahmins present. Consequently, many adapted their faith to the circumstances of their new countries. For example, many Hindus worshiped in Christian spaces and some adapted the Christian Virgin Mary statue to represent the Hindu deity of Kali Ma and suspended performance of pujas (religious rites) during the Christian season of Lent (Naidu 2007). Originally in Guyana, there was a lack of Hindu temples and many Hindus began worshiping in their homes, which was significant for preserving Hindu religious identity, and is a practice that continues today among many Indo-Guyanese Hindus.

Indo-Caribbean Migration

Large waves of Indo-Caribbean migration to the United States, England, and Canada occurred in the late 1970s and early 1980s because of economic and political pressures in the Caribbean. Initially, England and Canada were easier to migrate to than the United States. Some, like Dr. DhanPaul Narine of Ozone Park, studied abroad to extend their education, coming to the United States in the 1980s, while others joined the U.S. Army to become citizens after serving (Bacchus 2010). Migration continues to this day and local leaders expect the number of Indo-Caribbean Hindus in the Jamaica Bay Catchment area to grow in the coming decades, both from younger generations establishing families near their social and familial networks and with in-migration from Guyana and other Caribbean countries (Veerapan 2010)

Although Indo-Caribbean Hindus settled throughout the five boroughs, many Guyanese migrants settled in Queens, in areas where Asian Indians previously predominated. The Indo-Guyanese began to establish their own social networks, creating a space

1 Plantation owners thought that Eastern Indians would return to India after their servitude (mandatory 5 years). Therefore, they allowed Hindus to practice their religion because it was not perceived as threatening to mainstream social and religious customs.

for themselves, and paving the way for others to come from the Caribbean. The Richmond Hill neighborhood of Queens, nicknamed "Little Guyana," is one of the largest and most commonly known settlements for Indo-Caribbeans. Of Richmond Hill's foreign-born population, 19.2% are from the Caribbean (US Census 2000). Liberty Avenue serves as the central thoroughfare of the neighborhood, with a number of stores stocking traditional Indian items. In addition to an already existing Asian Indian population, Queens, and Richmond Hill in particular, offered Indo-Caribbean migrants affordable housing relative to other areas in New York City and close proximity to local airports, an important feature for a neighborhood with people coming to and from their homeland (Bacchus 2010; Veerapan 2010).

There is some tension between Indo-Caribbean and Asian Indian groups about which possesses the more "authentic Hindu identity" (Bacchus 2010). Many Indo-Guyanese women frequent the shops of Liberty Avenue to shop for Indian clothes. Shop owners tend to perceive these women as more "authentic" because of their purchases. However, most Indo-Guyanese need to purchase these items because they do not have a friend or relative in India to send clothes or other traditional items to the U.S. (Bauchhus 2010). Many Guyanese Hindus follow religious doctrine more stringently to compensate for their distance from India and their lack of personal connections to the country. Melawani (1995) asserts that despite Indo-Guyanese Hindus being "twice removed" from India (once to Guyana and once to NYC), the community is more "diehard and staunch in its Hindu beliefs than Indians from the motherland." Key informants explain that older community members and recent migrants are more likely to hold stricter religious beliefs and to be more adamant about following traditional religious rites and practices, such as leaving puja items in the water (Bacchus 2010; Doobay 2010).

Hindu Rituals in the Jamaica Bay Catchment Area

> "To understand Indo-Guyanese religious identity, you need to understand the links between India and water and how this translates into Guyana and the U.S." (Nazreen Bacchus 2010).

The Spiritual Significance of Water

In India, some of the most sacred geographical features are rivers, and the Ganges River is considered the most sacred. The Ganges flows from the Himalayan Mountains to the Bay of Bengal and is nearly 1600 miles long. Vedic philosophy, which influences

the fundamental beliefs of Hinduism, identifies water as a primordial spiritual symbol, and the Regveda identifies water as the *ayana of nara*, or the Eternal Being, and thus the underlying principle or foundation of the universe (Joshi and Fawcett 2001). Therefore, Hindus, since ancient times, have revered water as sacred. Devotees bathe in the Ganges River to cleanse themselves spiritually and physically, as well as perform cremation ceremonies on the River to return the deceased to the elements of the earth and facilitate reincarnation. Hindus honor the Ganges River through the deity of Mother Ganga, the goddess of sea and running water. Mr. Naidoo Veerapan describes the creation myth of Mother Ganga, stating that Shiva (the Supreme Being) created Mother Ganga "off his head."

> Water was coming from the heavens with such force that the people asked Shiva to find a solution. Shiva broke the force of the water (Mother Ganga) on his head so that the waves would break. So pictures of Shiva look as though he has a stream of water coming off the back of his head (Veerapan 2010).

In the sacred text of the Regveda, a prayer is offered to the deity of water: "The waters in the sky, the waters of rivers, and the water in the well whose source is the ocean, may all these sacred waters protect me" (Regveda 7.49.2 qtd in Dwivedi 1993: 23). Similarly, in the Yajurveda there is an invocation to water, "O! Water! You are the source of happiness and comfort. For our sake you bear food. Bless us with a sublime and splendid vision" (qtd in Bai 1998: 2).

Dr. DhanPaul Narine, President of the Shri Trimurti Bhavan temple in Ozone Park, Queens, said that "[T]he children of India take a piece of India, and the Ganges, with them wherever they go, and thus there are pieces of India and the Ganges all over the world." He continued to say that the Indian Diaspora seeks out water wherever they go, incorporating local water sources as part of their religious beliefs, as a symbol of the sacred Ganges River. Consequently, many Indo-Caribbeans, especially those living in Richmond Hill, have imbued Jamaica Bay with spiritual significance; Jamaica Bay has become a manifestation of Mother Ganga.

Water serves as the bearer of life and a means for attaining purity, both spiritually and physically. Mr. Veerapan describes the importance of water for Hindus. "Water is a cleaner, giver of life, a sustainer of plants; we can't exist without water. It is vital for life, for everything. The ocean is the mother of all" (Veerapan 2010). Devotees do not pray to the water as a physical entity, or an idol, but rather believe that coming into contact with the sacredness of water, as a source of life and spirituality, is important for liberating devotees from impurity (Joshi and Fawcett 2001; Narine 2010). Therefore, Hindus not only pay homage to Mother Ganaga for her inherent spiritual qualities, e.g., by celebrating holidays in honor of the goddess, they incorporate water as a central feature of most religious rituals and practices because of its life-giving and cleansing properties.

> Dr. DhanPaul Narine says
> Hindus detest pollution…Pollution is everywhere, and their lives are touched by it. Yet Hindus also have a spiritual obsession with purity. When the Indo-Guyanese come to New York City, everything needs to be pure. Coming to New York City [and to Jamaica Bay] allows people to escape the pollution of Delhi and the Ganges, because the people have a pure Ganges in their mind (Narine 2010).

Joshi and Fawcett (2001) support this sentiment, noting that the central concern of Hindu ritualism is the manipulation and maintenance of purity and impurity. Through religious rituals, particularly the puja, Hindus increase purity by coming into contact with things of pure status, such as water. When devotees make an offering to Mother Ganga, the Mother blesses them with more purity and devotees come closer to spiritual oneness with the Eternal Self (Joshi and Fawcett 2001; Narine 2010). Similarly, Hindus attempt to distance oneself from impure objects (Joshi and Fawcett 2001; Narine 2010). Dr. DhanPaul Narine remarked on the difficulty of balancing purity and pollution in modern society. "It is hard to balance purity and pollution. How do you reconcile purity with dead bodies and feces in the Ganges? How do you reconcile the dirty streets of Delhi with the need for purity?" (Narine 2010)

The Jamaica Bay Puja

According to Naidoo Veerapan, the Indo-Caribbean community knows of few places in New York to perform their religious rituals, or pujas, so they frequent the shores of Jamaica Bay, particularly the North Channel Bridge in Queens, which is roughly eight miles from Richmond Hill. Mr. Veerapan explains that devotees visit Jamaica Bay to place their offerings in the water, which carries offerings to the gods. He believes that

most people come to Jamaica Bay by car, carpool, or in some instances, such as holidays or rites of passage, cabs. Increasingly, devotees go to places around Jamaica Bay that are rumored to be lax in authority and are increasingly going at odd hours (e.g., 2:00am) to avoid enforcement. Although no one could give an exact number of devotees using Jamaica Bay at a particular time, John Zuzworsky, a former NPS employee, estimates that, at one time, roughly 100-200 people could be seen making offerings along the shores of the North Channel Bridge. Mr. Veerapan estimates that if the Indo-Caribbean community knew they could go freely to Jamaica Bay to perform their pujas, without harassment or penalty, that 50,000 – 60,000 families, and thus roughly 150,000 people, would utilize Jamaica Bay for their rituals throughout the year.

Devotees visit Jamaica Bay to perform religious rites or pujas. Pujas are the most popular form of worship. According to sacred scripture, devotees should perform pujas on a daily basis, or for important religious functions and holidays (Melwani 1995). However, the Indo-Caribbean population deviates from the traditional practice of daily pujas, instead, performing pujas once a year for thanksgiving or in special instances, such as ceremonies commemorating life milestones, to improve one's karma, or for special holidays and festivals (Bacchus 2010; Doobay 2010; Narine 2010; Veerapan 2010). Devotees may perform pujas directly on the beach, or, as is more common, in their homes or temple, later bringing offerings to the beach to consecrate them in water and offer them to the gods (Doobay 2010; Naidu 2010; Veerapan 2010).

Pujas are a time for devotees, through sincerity, concentration, and devotion, to awaken their eternal spirit within, working to connect with the Supreme Being (Melwani 1995). Pujas serve as a means of adoration and thanksgiving, penance and confession, spiritual contemplation, and as a means for making special requests. During the puja, devotees chant a mantra, a god or goddesses' name, or a special invocation to bring the statue of the deity, or *murti,* alive. Devotees distinguish this practice from idol worship because the gods and goddesses are manifest or incarnate, conscious beings, temporarily taking on the physical plane in the form of the *murtis*. During the process, the gods become aware of the thoughts and feelings of the devotees, and thus concentration is integral for devotees. The puja is a time to make connections between this world and the inner worlds of the gods and goddesses (Narine 2010; Veerapan 2010; *What is Hinduism?* 2007).

Although there are regional and denominational differences, pujas involve a gen-

eral sequence of events or procedures (Melwani 1995; *What is Hinduism?* 2007). First, devotees invoke God by chanting mantras and prayers. Lord Ganesh, the remover of all obstacles, is of particular importance to Indo-Caribbean devotees. If you do not invite Lord Ganesh to the puja, then the other deities will not come (Veerapan 2010). Once the deity (or deities) is believed to have arrived, a seat is offered to the god or goddess, as well as an offering of water. Then, devotees wash the feet of the deity, as a mark of reverence, love, and self-surrender. After washing the deity's feet, the devotees then bath the *murti* with water and sprinkle it with perfumes while chanting. Devotees then offer the deity clothes. Many Indo-Caribbeans offer the deities expensive saris, up to $200 a piece, because they only want to offer the best to the gods and goddesses (Doobay 2010). After the devotees offer clothes, they also offer other items that they think would be pleasing to the gods, including *pushpam* (flowers), *phalam* (fruit, particularly coconuts), *gandham* (sandal paste), *dhupam* (incense), *nalvedyam* (foods, e.g., rice), and *jalam* (water), while chanting sacred verses, prayers, and hymns (Melwani 1995; Narine 2010; *What is Hinduism?* 2007). Finally, the puja ends with an offering of aarati or the sacred flame, which is burned in a kund, or small vessel. After use, the kund is taken home and washed for next time. Fire is an essential element of the puja because the smoke serves as a medium for bringing the faithful's offerings to the deities (Bacchus 2010; Doobay 2010; Melwani 1995; Veerapan 2010).

All of the key informants suggested that it would be nearly impossible to predict when individuals or families choose to do their yearly pujas. However, they all said that the number of people performing pujas increases in the summer because of the pleasant weather and because of the social nature of the event. Thus, Naidoo Veerapan explains that community leaders (himself included) have invitations every Saturday for people who want to perform their pujas. Dr. DhanPaul Narine explained that given the large size of the community, pujas could happen as frequently as everyday.

In addition to a yearly puja of thanksgiving, devotees also make offerings at particular rites of passage or life milestones, known as *samskaras*. Although there are regional and devotional variations in the number of *samskaras,* Mr. Veerapan notes the importance of a head shaving ritual, known as *mundan*, for children, usually between one and three years of age. During the *mundan*, the child's head is shaved to cleanse them of any impurities and to signify freedom from the past. The hair is then placed in the water, as an offering to the gods. In addition to the *mundan*, all of the key informants mentioned

the importance of cremation ceremonies and the need to sprinkle the deceased's ashes into flowing water for a swifter and more complete release of the soul. By offering ashes, devotees ensure the return of the deceased to nature and the five elements, as well as the soul's safe passage to a higher world (Narine 2010; Melwani 1995; Veerapan 2010). After a loved one has died, families typically commemorate the death, on the same day each year, by going to Jamaica Bay and making offerings (Narine 2010).

As part of the puja, Indo-Caribbean Hindus leave their offerings in Jamaica Bay, believing that the sea with take the offerings to the gods and that the powerful Mother Ganga will absorb or degrade all that is offered (*Bacchus* 2010; Doobay 2010; Narine 2010; Veerapan 2010). However, because of the Bay's circulation patterns, much of the offerings end up washing back onto the beaches and marshes. Commonly found items along the shores of the North Channel Bridge include coconuts, statues (*murtis*) and pictures, flowers, garlands, saris, bamboo poles and flags, candles and incense, and aluminum trays. Devotees do not throw these items in the garbage because to do so would be sacrilegious; these are offerings to the gods, not litter or garbage (Doobay 2010; Veerapan 2010). An elderly woman, in response to suggestions to remove puja items from the water, said, "well if we don't place the items in the water, it must be a sin. Then what will we do? It said in the scripture that we should place these puja items into the water and so it must be a sin if we do not do that" (Doobay 2010). Furthermore, Ms. Kamini Doobay believes that because the sacred texts specify placing offerings in the water, that none of the pandits, or priests, would tell their constituents to stop doing the pujas. Consequently, Ms. Doobay suggests the need to update scriptural interpretation as well as a need to find a common ground where devotees are free to practice their beliefs while not harming the environment (Doobay 2010).

Changes in Indo-Caribbean Uses of Jamaica Bay

Over the past twenty years, NPS officials have visited local temples to inform community members of the Park's rules and regulations, have established programs to collect remnants of religious offerings for charities, and entered into an informal verbal agreement with the Hindu community to allow only biodegradable items in the water[2] (Krause 2009; Zuzworsky 2009). Despite these efforts, Hindu offerings continue to wash

2 The recycling/charitable donations program has gone by the wayside. In a newspaper article, Brian Feeney, NPS spokesman, said this approach "didn't work out" (Landor 2008). Park officials have also gone back to disallowing biodegradable materials in the water, citing negative ecosystem impacts (Krause 2009).

up along the shores of Jamaica Bay, particularly at the North Channel Bridge. In 2008, two articles in local Queens' newspapers drew attention to the issue, "Beach Trashed During Religious Ceremony" and "Debris from Hindu rituals on Jamaica Bay shoreline irks community." The articles detail the opinions of some local community members and elected officials. Representative Anthony Weiner (D-Queens and Brooklyn) is quoted, "[E]ven if the activity is permitted, leaving behind trash cannot be. We cannot have a situation where people are leaving behind ceremonial pines. . .leaving shrines of their garbage" (Landor 2008).

In response to the negative press in the local papers, Mr. Parry Ramgarib from the Federation of Shiva Mandirs and Dr. DhanPaul Narine met with Park officials to organize a clean-up of the North Channel Bridge as well as publishing an article "This Dumping Must Stop" in their local newspaper *The West Indian*. In addition to organizing several beach clean-ups, The Federation of Hindu Mandirs and the USA Pandit Parishoners, along with leadership from the Shri Tamurti Brahvan temple, have taken action to educate devotees about the ecological consequences of puja offerings. Consequently, Dr. DhanPaul Narine and Mr. Naidoo Veerapan believe that religious remnants on the shores of Jamaica Bay have declined as a result of these efforts (Narine 2010; Veerapan 2010).

The Indo-Caribbean community is increasingly aware of the Park's rules and regulations and of Jamaica Bay's ecological sensitivity. This increasing awareness, combined with some intimidation from local community members, has led many Indo-Caribbean Hindus to alter their practices, such as seeking other places to perform their pujas (Naidu 2010; Veerapan 2010; Zuzworsky 2009). As opposed to leaving puja items in the water, Indo-Caribbean leaders are recommending that devotees touch the offerings in the water (some say seven times) to consecrate the items and then take them home to give to charity or to bury in their yards. While some have complied with these requests, others continue to perform pujas as before because they can get away with it, while others have been sneaking to Jamaica Bay at night, when enforcement is down, to place puja offerings in the water or bury puja items in the sand. Key informants also indicated that some community members have started performing pujas at home or have quit performing pujas altogether because of the rules against placing offerings in the water (Narine 2010; Veerapan 2010). Community leaders did not feel, however, that these changes had negative spiritual impacts for devotees. Finally, because they were

told not to litter and because of the threat of fines, Indo-Caribbean Hindus have sought out other places to perform their pujas. Many devotees have started to go to Rockaway Beach in Queens because of its close proximity to their neighborhood and because it is rumored that the city authorities (as opposed to the Federal government) are more lenient (Doobay 2010; Narine 2010; Veerapan 2010; Zuzworsky 2009). Additionally, Mr. Veerapan notes, "[P]eople don't want to be a spectacle to other non-Hindus who are at the beach" and Rockaway Beach, beyond lax authority, offers more space for devotees to perform pujas without receiving the *obyia*, or evil eye (*Bacchus* 2010; Veerapan 2010).

Anticipated Changes in Indo-Caribbean Uses of Jamaica Bay

Community leaders expect the Indo-Caribbean, particularly the Indo-Guyanese population, to increase and to spread beyond the Richmond Hill and Ozone Park neighborhoods. As people from the initial waves of Indo-Caribbean migration (1970s to 2001) become established in New York, they create spaces and opportunities for others living in the Caribbean to migrate to the area. Furthermore, established social and familial networks also attract many second generation Indo-Caribbeans to settle in the area as they start new families. Mr. Veerapan observes that this process is already underway. "Previously the neighborhoods were dominated with non-immigrants and now there is a large number of Guyanese or Indo-Caribbean populations. Therefore the issue of puja worship within the Park and city will grow with the population" (Veerapan 2010). Similarly, Nazreen Bacchus notes that Queens Village has become increasingly popular among the Indo-Guyanese community.

Community leaders recognize the need to work closely with National Park and City of New York officials to find an acceptable solution to the issue of puja worship along the city's shorelines. Community leaders have met with representatives of Mayor Michael Bloomberg's office and requested beach designations for puja worship at Rockaway Beach in Queens, a location in the Bronx, and one in Manhattan (Veerapan 2010). Mr. Veerapan said that the community did not request designated spaces along Jamaica Bay because they did not want to interfere with the preservation of wildlife. Consequently, one possible change could be the significant decline of the Indo-Caribbean community from the immediate Jamaica Bay landscape with a corresponding rise in their presence along the waterfront in other areas of the city.

The Indo-Caribbean community's future use of Jamaica Bay will be conditioned by changes in the community's population and their evolving relationship with the Na-

tional Park Service and the City of New York Parks Department. On the one hand, population changes will likely yield an increase in the number of Indo-Caribbean Hindus seeking to fulfill their religious obligations along the city's waterfront. With the influx of new migrants and an aging population, it is likely that there will be an increase in the number of individuals who adhere to strict religious interpretations and are more adamant about leaving their puja items in the city's waters. On the other hand, many Indo-Caribbeans have already begun to alter their behavior along Jamaica Bay, either by removing their puja items, coming at odd times, or abandoning Jamaica Bay altogether. All of the key informants indicated that the community enjoys Jamaica Bay, stating that it is not their intention or their wish to deliberately litter or abuse the Bay. Rather, much of the community is uneducated about the rules and conflicted by the need to adhere to ancient, sacred tradition and contemporary environmental laws.

Suggestions and Recommendations

The overall consensus among key informants was that the relationship between the National Park Service and the Indo-Caribbean Hindu community must continue to evolve so that devotees can practice their faith without intimidation and without violating environmental laws. Key informants suggested a combination of fines and education, but stressed the need for collaboration with community leaders so that it did not appear as a top down process, devoid of community input. Dr. DhanPaul emphasized the need for constant dialogue with the Park Service, so as to establish a sense that they are "one community" with the Park.

Park Service and community efforts to reduce the amount of puja items on Jamaica Bay's waterfront have been met with mixed results. Mr. Naidoo Veerapan and Dr. DhanPaul Narine both mention the positive responses from community members after National Park Service officials gave presentations during temple visits. However, Ms. Kamini Doobay notes that many responded negatively to her initial newsletters and blog postings about the issue, saying that she was "trying to change the religion." Dr. DhanPaul Narine believes that while 99% of the other pandits and temple leaders might agree with the approach advocated by the Federation of Shiva Mandirs and the USA Pandits Parishoners, many are simply paying lip-serve and do not enforce or carry out these practices within their own temples because there has been no deterrents in the past. Therefore, Dr. DhanPaul Narine suggests education for some of the local Indo-Caribbean Hindu priests so that they discourage their congregations from leaving puja

items in the water. He explains that some pandits have never been to Jamaica Bay, and are unaware of the situation, while others participated in clean-ups many years ago, and so believe their responsibility has been absolved. Although information about ecological issues can come from the National Park Service, some of the education needs to be done among Hindu leaders because the issue is one of scriptural interpretation.

Several informants suggest that imposing fines, or threatening to impose hefty fines, would deter people from leaving puja items in Jamaica Bay (Doobay 2010; Naido 2010). However, others thought that this would simply result in devotees coming at night and/or going to other locations, such as Rockaway Beach, without actually educating the community about the ecological consequences of puja offerings (Zuzworsky 2009).

Despite their views on fines, all of the key informants suggest extending outreach and education programs, with the Park and the Mandirs (congregations) reinforcing one another on the rules and regulations of acceptable puja practices. For example, Ms. Kamini Doobay notes that many community members do not know what is biodegradable and what is not, and Mr. Naidoo Veerapan observes that many community members are confused as to why they cannot put biodegradable items in Jamaica Bay, citing conflicting messages from their pandits and Park rangers or Park police. Therefore, he suggests the need for spelling out the dos and don'ts of puja practices. Dr. DhanPaul Narine supports this, stating that because this is a large first generation immigrant community, there is no authoritative literature available to guide their actions so that they can address their Hindu beliefs and protect ecological systems. Consequently, Dr. DhanPaul Narine suggests developing a brochure to specifically address the Jamaica Bay issue. He said the brochure could be in English, but that it would need to address Hindu cultural issues, as well as quoting the Federation of Hindu Mandirs, and noting that the Federation and the Park agree on certain issues/practices and then listing the practices. Dr. Narine also thought this brochure might provide cultural education to local non-Hindu communities.

In addition to brochures, community leaders suggest developing other media, such as television, radio, and web resources. Dr. DhanPaul Narine suggests free instructional DVDs for community members, as well as placing relevant materials on the NPS and the temples' websites. Outside of producing educational materials, community leaders suggest that National Park Service officials continue to come as guests to the temples to discuss the Jamaica Bay issue (Doobay 2010; Narine 2010; Veerapan 2010). For exam-

ple, Dr. DhanPaul Narine suggests that Park officials bring items from the beach, either Hindu offerings or natural features, to show how they have been destroyed as a result of the activities on the shorelines. Alternatively, the Park could bring bags of garbage so people could see how much of the offerings end up in the garbage. Dr. DhanPaul Narine also suggests holding a ceremony at the North Channel Bridge pavilion to show devotees how they can make offerings to the gods without leaving the items on the beach.

Besides educational materials and outreach, Dr. DhanPaul Narine suggests that the National Park Service hire a couple of people from within the Indo-Caribbean community. In doing so, the Park ensures that when people come to do offerings at Jamaica Bay, they encounter someone who is familiar with Hindu culture and practices and who can effectively explain the rules in regulations in ways that are understandable for community members. Dr. Narine and Mr. Veerapan also recommend that the Park provide positive feedback to the community, where appropriate, because this will reinforce the idea that people's individual actions can make a difference and that they are doing the "right" thing.

Community leaders would like the National Park Service to designate a space where the community can offer their cremation ashes. Dr. Dhan Paul Narine says that they were in conversation with Park employees last year about designating a space for cremation ceremonies. However, the Park disapproved of the community offering flowers and rice with the ashes, and so they left the conversation at that. Dr. Narine states that they would not deposit the ashes of the entire person, but would rather offer a symbolic portion within Park rules.

Finally, community leaders continually stress that the National Park Service and the community must collaborate. Mr. Veerapan feels that if the Park fails to actively and continually involve the community in their education and enforcement, then there may be backlash against the Park's efforts. If the Park does not partner with community leaders, then Mr. Verrapan worries that some people may be more likely to go against the Park Service's rules and regulations as a way of showing the gods their dedication. Consequently, community leaders believe that collaboration and continual education and outreach (every two or three months) will be the most effective way for ensuring that the Hindu community can practice their ancient traditions without fear or discomfort (Doobay 2010; Naidoo 2010; Veerapan 2010; Zuzworsky 2009).

Hindu Festivals and Religious Holidays

The following material is drawn from *Hinduism Today* and the Shri Trimurti Bhavan website and supplemented by discussions with key informants.

Mahasivaratri – February/March
This holiday marks Siva's great night and it occurs on the fourteenth day of the dark half of Aquarius (February/March). Devotees fast all day in preparation to worship Lord Siva from evening until dawn. The devotees bathe Siva with water, milk, honey, and saffron water while chanting the Sri Rudram, a Vedic hymn to Siva or by reciting his name 1,008 times. Devotees break the fast after the last puja is finished at dawn with offerings. The following day is a day of festivities and the contemplation of endlessness/beginninglessness.

Holi – February/March
This holiday is also known as Phagwai (look up) and the devotees splash friends with bright colored waters and paints. The holiday occurs on the full moon day of Aquarius (February/March) and several days preceding. Many start bonfires to burn effigies of demons and visit friends and exchange presents. It is a celebration of spring as well as a commemoration of the infant Krishna's killing of the demoness Putana. This holiday is very popular to the devotees of Krishna. The holiday represents the triumph of good over evil, a new agricultural season, and a renewal of relationships.

Ram Navami – March/April
Celebrates the birth of Lord Rama, the 7th incarnation of Vishnu, who was born on navami, or the 9th lunar day or tithi (March/April). Devotees engage in a non-stop recitation of the Ramayana, the epic story of Ram's life. In the evening crowds attend the Ramalila, a dramatic performance of Rama's deeds. Devotees may also fast or eat only fruit for the nine days before or after navami and many contribute to temples or to charity. Lord Rama is not only an incarnation of God, but also the ideal man, one who exemplified the virtues of reverence, obedience and duty.

Raksha Bandham – July/August
This holiday takes place during the full moon of Karkata or Cancer (July/August). During this holiday, sisters tie Rakhi, or a ribbon, around their brother's wrist, who in return present their sisters with clothing, cash, or jewelry and become obligated for the safety of their sister. Rakhi may be given to anyone chosen or anyone who may symbolize the relationship of a brother. There are three knots tied, which represent protection in thought, word, and deed. The holiday is also celebrated as Naradi Purmnma "coconut full moon" when coconuts are offered to Varina, the God of the Sea, by throwing coconuts in the ocean. The holiday dates back to Vedic times when children began the years' study.

Guru Purnima – July
This holiday occurs on the full moon day of July with garlands, gifts and devotion to show love and gratitude for the wisdom throughout the year. It is an opportunity to renew one's commitment. The traditional form of worship is a pada puja, which involves a ceremonial bath of your guru's feet with water, milk, honey, and sandalwood paste, as well as an offering of 108 gold coins. The holiday is also known as Vyasa Puja to honor

the Sage Vyas, a codifier of the Vedas sacred scriptures. For this purpose, there are offerings of lime and rice. It is a day for reading religious books and remembrance of gurus through whom God grants grace and enlightenment.

Krishna Janmas (July/August)
This holiday commemorates Lord Krishna, the 8th incarnation of Vishnu, who was born on the 8th lunar day of the dark half of Cancer (July/August). On the preceding day, devotees fast until midnight, at the time Krishna was born 5,000 years ago, they break the fast. At the temple celebration, at midnight, the priest places a baby Krishna in a hanging crib. There are also hanging pots of sweets, curd, and butter, which are hung near devotees homes in recognition of Krishna's love for these items. Festivities continue on the following day with pujas, storytelling, and theatre depicting major Krishna events.

Ganesha Chaturthi – August/September
This holiday is celebrated by all Hindu sects and is considered a day of solidarity and unity among Hindus. The holiday occurs on the 4th lunar day of Leo (August/September) and commemorates the birthday of Lord Ganesha, the elephant-headed God of Wisdom and Lord of Obstacles. Devotees often make clay images of Ganesha and decorate the images. At the end of the day (or seven to ten days later), the images are ceremoniously immersed in the ocean or stream to signify the creation of Ganehsa from the Earth and the return and dissolution in the ocean of universal consciousness. Lord Ganesha removes obstacles and ensures smooth progress in all ventures throughout the year.

Navaratri aka Durga Puja – August/September
This festival of 9 nights honors the Goddess and begins on the first lunar day of the bright half moon of Virgo (August/September). There are three days each devoted to: Durga (symbolizing valor), Lakshimi (symbolizing wealth), and Savasrati (knowledge). During this holiday, devotees create an image of the goddess, which is worshiped for ten days, and then immersed in the sea. It is a day to give one's tools a rest. Day ten marks the vijaya dasami, which marks the commencement of learning. There are a number of regional differences in the celebration of this holiday. Navratri festivals are customarily performed at the temple and then the items are taken to the beach and placed in the water.

Diwali – October/November
Diwali is the festival of lights on the 14th lunar day of Libra (October/November) with related festivities on adjacent days, including the five days around the new moon. Diwaili is the most celebrated Hindu festival in the world. One explanation behind the holiday is that it commemorates the day when Lord Rama returned to Ayodhyn after spending fourteen years in exile, though many reasons for the day are cited. Diwali is also a celebration of renewal as the New Year commences. Devotees take special baths in the morning and don new clothes; they clean, paint, and decorate their houses. The goddess Lakshimi is invoked to bring prosperity in the New Year and the day designates the beginning of a new fiscal year. The holiday is considered a time of renewal of family bonds and forgiveness. The holiday holds official status as national holidays in nine countries, including Guyana and Trinidad.

Jewish Ritual Uses of Jamaica Bay Resources

Writing of Jamaica Bay and South Shore Staten Island at mid-Twentieth Century, Joseph Mitchell draws on the experience of his informant and friend, the Shellfish Protector, Andrew E. Zimmer. Given his line of work, Mr. Zimmer, had observed a great variety of collectors and gatherers who came to poke around the edges of the bays. Most non-birder or non-fishermen who visited the marshes and mud flats at different times of the year were of immigrant Italian other European backgrounds, seekers of edible plants. Zimmer's and Mitchell's only example of religiously motivated visits involved Jewish gatherers on a religious mission:

> In September or October, the rabbis and elders come. On Hoshanna Rabbah, the seventh day of the Festival of Succoth, an ancient fertility rite is still observed in a number of orthodox synagogues in the city. The worshippers who take part in the rite are given bunches of willow twigs; each bunch has seven twigs and each twig has seven leaves. After marching in procession seven times around the altar, chanting a litany, the worshipers shake the bunches or strike them against the altar until the leaves fall to the floor. The twigs must be cut from willows that grow beside water, the buds on the ends of the twigs must be unblemished, and the leaves must be green and flawless.
> (Mitchell, 1951)

Joseph Mitchell might be surprised to learn that during the High Holiday season in the Jewish neighborhoods of the Watershed area, there are even more of these willows being held up in prayer, in more Brooklyn family sukkah and synagogues, shuls, and sthiebles, then there were sixty years ago. Even though the proportion of Jewish New Yorkers who are of foreign birth is far lower than in Mitchell's secularizing city, there has been a resurgence of Orthodox Judaism and Jewish religious observance more generally in Brooklyn and Queens over the past decades. Today the majority of families and congregations appear to be using willows and branches for their ritual huts and for the ceremonies that are from purveyors within the community who can attest to their level of quality and purity. Perhaps paradoxically, as the Jewish population of the area becomes more orthodox, there are fewer willows or branches cut by rabbis along the edges of Jamaica Bay. There are religious and "habitat" explanations for why this particular Jewish religious use of bay resources is in decline, if it is still practiced at all.

If willows or branches were taken from the bay, Rabbi Tomsky of Belle Harbor's orthodox Congregation Ohab Zedek explained to us, their use in ritual could be suspect. Jewish law, Rabbi Tomsky said, prohibits the use of anything stolen or taken without

permission, so that willows taken along the bay might have in effect been stolen or taken without permission. In consequence, Rabbi Tomsky's congregation, and other orthodox ones in the area, will only use willows whose origins they are certain of. They can be donated from the backyard of a congregant, perhaps, or simply purchased from a kosher supplier who specialized in a full line of certified merchandise that will relieve any possible anxiety about provenance.

The contrast between the pastoral image of rabbis and elders collecting willows and branches for the sukkah in the bay's marshes, with going on line to an orthodox purveyor of willows, attests to cultural changes in the nature of New York's Jewish orthodoxy, and changes in the way the edges of the bay are perceived as well. The post-war rabbis Mitchell and Zimmer observed were gathering reeds and willows from what must have seemed to them to still be a wilderness edge of the city (although, as we have seen, every inch of the bay was spoken for). In 2010 it is much more difficult to find a convenient place to walk out on a marsh, find willow shoots or small trees, and clip the preferred shoots. The demand is greater and the certain supply no longer easily obtained in the bay, not at least under circumstances that pass ritual muster.

Groups of Jewish families often use Gateway's public areas around Jamaica Bay just as other families and households do. Orthodox Jewish groups may be identifiable as Jews in public because men are wearing yarmulkes (skull caps) and married women cover their own hair with wigs and scarves. More orthodox members of local Hassidic congregations are even more identifiable by their distinctive dress. But visible appearances hardly reveal further important divisions of belief and practice that help explain who appears in outdoor religious observance.

The greatest number of American Jews may belong to a synagogue congregation, especially when their children are of school age and receiving religious instruction, but they are not necessarily observant except on the High Holy Days between Rosh Hashanah (New Year) and Yom Kippur (Day of Atonement) which occur in September or early October. The more orthodox the congregation, the more stringent its members' adherence to religious calendar and to the rules of Kashrus (kosher) in the home and in public. In almost all the communities surrounding Jamaica Bay, there are Jewish congregations of every description, which requires a brief overview of the major segments of the large Jewish community.

Ashkenazi Jews are those who trace their origins to Europe and Russia, while

Sephardic Jews trace their origins and particular liturgy to Portugal and Spain. This remains an important ethnic and ritual distinction for synagogues in the New York Metropolitan region, although aging congregations are a particular problem for the Sephardic congregations of the Watershed. Aside from this ethnic division, another and more important one for understanding the Watershed's Jewish congregations involves the major denominations. These are divisions based in important differences in ritual and practice, as is true with Christian denominations.

The Reform Movement

The Reform movement is America's largest Jewish denomination, "with many members group--and many of its members proudly connect to the "Reform" part, appreciating their denomination's historical emphasis on prophetic Judaism and social action, personal choice in ritual matters, and embrace of patrilineal descent (considering as Jewish children whose fathers are Jewish and mothers are not, in contrast to traditional Jewish law, which considers only those with Jewish mothers or acceptable conversions to be Jewish). At the same time, the Reform movement has in recent years begun to embrace traditional observances it shunned a generation ago, signaling a new affinity for Jewish ritual among many Reform Jews. In 1999, the movement issued a set of guidelines known as The Pittsburgh Platform, which encourages Reform Jews to study Hebrew and Torah, observe Shabbat, and recognize the importance of mitzvot (commandments).

The Conservative Movement in Judaism

The Conservative movement "represents a shrinking proportion of the Jewish population, though it is also seeing rising synagogue attendance rates and increasingly strong educational institutions. The range of observance within the movement is wide, and many observers have commented on the wide gap between the observance level of Conservative clergy and laypeople."

Reconstructionist Judaism

Reconstructionist Judaism like Reform congregations stresses personal choice in rituals, is " the smallest and newest of the major denominational groups, has seen increased growth in recent years, and has benefited from the fact that its members have made an active choice to be affiliated with the movement; because of the denomination's small size and youth, most congregational members do not attend "by default"--because they have longstanding connections to the movement or because it is the only available

synagogue option--but because Reconstructionist Judaism speaks to them."

Orthodox Judaism

Orthodox Judaism the most rapidly growing segment of the Jewish population of the Watershed area, has "attracted growing members of non-Orthodox Jews to its ranks. Orthodox communities are increasingly vibrant and well-educated, and ritual observance has become increasingly stringent and conservative. At the same time, Orthodoxy has become more withdrawn from and wary of the broader secular culture. At the same time, feminists and other liberal-minded Orthodox Jews have challenged this shift to the right; their synagogues, schools, and other institutions ensure lively diversity and debate within the Orthodox world." (www.myjewishlearning.com).

These four movements are the "major" denominations. Within orthodox Judaism, however, there are many Hasidic congregations, each with its particular history, almost all of them represented in Borough Park and the Rockaways today. Within orthodox Judaism there is also a trend toward small, independent shuls or congregations known as stiebles or minyan. Rabbi Dr. Louis Jacobs explains how the Hasidic congregations of eastern Europe came to settle in Borough Park and other American cities after WWII. Note as well his comment on the origin of the stieble congregations:

> Each Zaddik (or Rebbe, as he was called, to distinguish him from the traditional Rav, the town rabbi) had his own court to which his devoted followers journeyed periodically, especially to be with the Zaddik on the great festive occasions of the year. There were often fierce rivalries between the different dynasties, and occasionally, struggle for the succession in the dynasty itself. When Mordecai of Chernobil died in 1837, each of his eight sons founded a new dynasty, as did his son-in-law. It was far from unusual for a Hasid to ask another Hasid: "To whom do you journey?" meaning to which Zaddik do you owe allegiance?
>
> While some Hasidim settled in the land of Israel in 1777 and a very few settled in western Europe, the vast majority remained in Eastern Europe, where, before World War II, hundreds of Hasidic dynasties flourished. The pattern was for the Rebbe to reside in a small town with his followers meeting for prayer, study, and companionship in a **small conventicle, the stiebel.** These small meetinghouses were found everywhere in the villages and in the larger towns. The dynasties were known by the name of the town in which the Rebbe resided.
>
> After the Holocaust and the resulting destruction of the great European communities, the Rebbes who survived created a new home for themselves in the state of Israel and the USA, taking care to preserve the name of the European centers at which they and their ancestors held

> court. The Hasidic master who held court in Boston was the exception in that he became known as the Bostoner Rebbe. The best-known and most influential Hasidic dynasties on the contemporary scene are those of Belz, Ger, Satmar, and Lubavitch. (Rabbi Dr. Louis Jacobs http://www.myjewishlearning.com/history/Modern_History/Early_Modern/Hasidism.shtml

Borough Park, which is often cited as the largest single orthodox Jewish community in the United States, is home to congregations representing almost all the existing Hasidic dynasties, as well as some which are less ultra-orthodox. The community is also represented by a number of Jewish social welfare agencies that represent the needs of the community's orthodox residents. When elected officials and governmental representatives wish to get anything important done in the Jewish neighborhoods of Borough Park and Crown Heights, they are most effective when they can convene leaders of the organized congregations and agencies, as in this example of a recent meeting to discuss details of how the 2010 U.S. Census would be best administered in the deeply religious community:

> The meeting was attended by over 50 community leaders including: Rabbi Yechezkel Pikus, Executive Director, Council of Jewish Oranizations of Flatbush; Rabbi Yechiel Kaufman, Executive Director, Boro Park Jewish Community Council; Rabbi Chaim Israel of Southern Brooklyn Community Organization; Rabbi David Moskovits, President, Endowment for Democracy in Eastern Europe; Rabbi Shaul Rosen, President, A Time; Rabbi Gershon Tannenbaum, Spiritual Leader, B'nai Israel of Linden Heights. As well as representatives from Bikur Cholim D'Borough Park, Yad Ephraim, Masbia Soup Kitchen, Human Care Services, Nachas Health & Family Network, Boro Park Shomrim & Touro College, who Senator Parker collectively ordained The Boro Park Census Count Committee
> http://www.vosizneias.com/51213/2010/03/14/brooklyn-ny-senator-parker-meets-with-borough-park-jewish-commumnity-over-census-count

As noted earlier, growth of orthodox congregations in Borough Park stands in vivid contrast with the decline of the Jewish population and its institutions in Canarsie, one of the oldest Jewish communities in New York. Schlomo Greenwald, in a review of Canarsie's Jewish history, writes "Jews began populating the area before World War II when only three synagogues existed. In the 1950s, the neighborhood started to grow, with many Jewish refugees who survived the Holocaust. In no time there were eight Orthodox synagogues, two non-Orthodox temples, several yeshivas, and at least five smaller shtiebles (Orthodox, but more informal, synagogues.)

> "There were at least 15 shuls," said Rabbi Jacob Jungreis, "and they were all jammed pack. You couldn't get a seat."
> Rabbi Jungreis comes from a family that once was considered something of a dynasty in Canarsie. He, his father and his brother each had a synagogue in the community — all of which were associated with their yeshiva, Ateres Yisroel. The three synagogues have since closed, and the yeshiva, which was once bustling with students from the area, now relies on students bused in from other neighborhoods to fill its classrooms. (Greenwald 2004)

Rabbi Rakowitz, for over 35 years the leader of Canarsie's Sephardic Jewish Center, explained this decline to writer Greenwald in familiar terms: "As the houses in Canarsie became more valuable in the 1970s and 1980s, many Jews sold their homes, but not to other Jews. Older Jews died or relocated and younger Jewish families did not replace them as happened years ago. Invariably, fewer Jews populated the neighborhood chiefly because young Jewish couples were less likely to move to or remain in Canarsie, even if one of them grew up here.(Greenwald 2004). But as shown in the demographic analysis in Chapter 3, this decline is by no means uniform throughout the watershed area. Jewish congregations in Far Rockaway, Lawrence and Cederhurst are growing steadily, especially in orthodox membership. Orthodox congregations in Belle Harbor and Howard Beach are holding their members, as is true in Belle Harbor, and Mill Basin. As orthodox congregations grow in some parts of the watershed area, the issue of delimiting a religious space known as an eruv (eruvim, plural form) becomes one of the most important ways religious practice makes demands on local resources and the authorities who manage them.

Eruvim: Creating Religious Space in Secular Communities

During the late 1970s and into the next decade, residents of the Rockaways engaged in a debate over religious and secular space then ended up in court and resulted in one of the first legal precedents about an issue that embroils many communities where orthodox congregations request to be allowed to install an eruv around the perimeter of their community. Eventually the lawsuit which was brought by group of Rockaway resisdents against the proposed eruv was defeated in court. The Rockaway eruv controversy still stands as one of the first of a long line of cases about whether the creation of such a symbolic space is a violation of the constitutional separation of church and state.

An eruv is an unbroken physical delineation of a district in which Orthodox Jews

on Saturdays may carry or wheel things, which they would be forbidden to do on the sabbath except in their homes. Because the Sabbath is a day of rest, activities like carrying, cooking or traveling are proscribed. An eruv creates a symbolic boundary that designates an entire residential area and the synagogues within it as "one domain," or a shared space. The most recent effort to surround a part of the city with an eruv has occurred in midtown and lower Manhattan where, according to Rabbi Sarna of Congregation of Congregation Adereth El, on East 29th Street, "It domesticates the space, makes it like one home, where everyone is a family." (Chan 2007) The Eruv satisfies most orthodox rabbis and enables Jewish communities to enjoy the Sabbath (Shabbat) with greater ease. It also allows disabled or incapacitated people who depend on crutches, canes, walkers or wheelchairs and parents of toddlers who must be wheeled in baby carriages or strollers, freedom of movement on the Sabbath. Absent an eruv, these activities are considered "carrying" and are thus impermissible. In order to satisfy Jewish law, the eruv must be at least forty inches high, roofless, and continuous (without gaps). Traditionally, an eruv would follow the natural features of a city. Today, in creating an eruv, a local government usually allows the Orthodox community to string wires along utility poles to fill the gaps where creek beds or freeway sound walls do not already establish a usable boundary. Constructed eruvim rely on the use of public property such as utility poles and power lines, as they surround both private premises and public streets. Another requirement of an eruv is that its boundaries bear a resemblance to a string of doorways. (University of Maryland Law Journal 2009)

The Belle Harbor eruv case of the early 1980s was widely reported on in the local and national press at the time, and exposed a simmering controversy among Jewish residents of the Rockaways, somewhat divided between orthodox supporters and some more liberal opponents, as this account of the controversy notes:

> . . . when four Orthodox congregations created the eruv in the Rockaways earlier this year, after city agencies had given them permission to use the lampposts and raise the sea walls, a local resident challenged the move in a class-action suit in State Supreme Court in Jamaica.
>
> The resident, Joseph M. Smith, said the eruv (pronounced AY-ruv) violated the constitutional ban on governmental actions that helped to establish religion. The suit argued that ''enclosing'' the area ''by this religious device would create a religious aura in and have a metaphysical impact on the area.''

> Justice Aaron F. Goldstein last week rejected this view, in what the lawyers in the case said could be the first court ruling on the issue of the eruv's constitutionality.
>
> ''The actions of the city agencies did not establish religion but were a valid accommodation to religious practice,'' the justice held, adding that the United States Supreme Court had mandated ''accommodation for religious practices.''
> (Fried, 1985)

Mr. Smith a retired physical education professor at Brooklyn College, was himself Jewish and claimed that hundreds of Jewish residents of the area who were not Orthodox had joined hundreds of non-Jewish residents in the class-action suit. For their part, Orthodox leaders said 450 families would benefit from the eruv.

Virginia Waters, an assistant city corporation counsel, said the eruv marked the area bounded by Beach 116th Street, Beach 149th Street, Beach Channel Drive and the boardwalk and sea walls. The area includes the communities of Belle Harbor, Rockaway Park and Neponsit. In his ruling, Justice Aaron F. Goldstein also wrote that:

> The city had allowed the nylon cord to be strung along 63 lampposts about 20 feet above ground. It had also permitted the height of 15 sea walls to be increased to about 40 inches.
>
> Justice Goldstein noted that under Jewish law an object had to be at least that high to serve as part of an eruv. The city built the sea walls years ago to prevent flooding and erosion of property bordering Rockaway Beach.
>
> Justice Goldstein said the sponsoring congregations had paid the $18,000 cost of creating the eruv, including the work on the sea walls.
>
> Rejecting the argument that the eruv was a wall that enclosed and separated the area, Justice Goldstein said, ''The eruv is a virtually invisible boundary line indistinguishable from the utility poles and telephone wires in the area.''
>
> ''The actions of the city agencies did not establish religion but were a valid accommodation to religious practice,'' the justice held, adding that the United States Supreme Court had mandated ''accommodation for religious practices.''
> (Fried, 1985).

There are over thirty eruvim in the five boroughs at present, and they help promote a far livelier public presence of orthodox families and congregations in public on the Sabbath than would otherwise be possible. The subject of eruvim, however, remains a controversial topic on the Rockaways, as it is in Borough Park and elsewhere in the city

today. Although these issues do not directly affect Gateway management at the moment, they have in the past and could well do so again, although with the decline of the Jewish population in Canarsie that is somewhat less likely than it was in Gateway's first decades of operation. Rabbi Tomsky, spiritual leader of Belle Harbor's orthodox Congregation Ohab Zedek, spoke to us about the excellent cooperation and support by city park managers on the Rockaways, especially in maintaining the sea wall segments of their eruv, but he appeared to have little contact with Gateway management. His predecessor in leadership of the congregation had much more dealings with the Park Service when the original eruv plans were being developed. Gateway's first superintendents, Joseph Antosca and Herb Olsen, had been part of the early discussion of the Rockaway eruv, when there was the possibility that the string boundary would extend past Beach 149th Street along the Boardwalk at Riis Park. A rabbi from one of the local reform congregations sounded a different note however. This religious leader mentioned that many in the congregation continued to oppose the eruv because it attracts more orthodox jewish home buyers to the community, potentially creating more of the type of inter-group conflict that has more recently divided neighbors on the Western Rockaways and the Five Towns. This recent commentary published in the Wave by a rockaway resident exemplifies the controversy as it is occurring in the extreme southeastern quadrant of the watershed area:

> A few months ago, I was in Cedarhurst early in the morning to shop at the bookstore (how I wish there was a bookstore in Rockaway). When I got there, the Nassau cops had a few cars in front of the store. I went in. One of the young clerks was from Far Rockaway and knew me from previous visits. She told me that they found a note on the door that warned them that the store would be destroyed by fire if they continued to open on Saturdays. The note was unsigned, but the store manager t the time told me that they had lots of problems with the Orthodox Jewish community that has all but taken over the shopping areas in Lawrence and Cedarhurst. (Schwach , 2007)

Intergroup conflict continues from time to time in Lawrence where controversies have centered on the election of orthodox members of the local school board, for example, but in nearby Far Rockaway there is an extensive eruv embracing a multi-synagogue area that has generated far less controversy than did the eruv of the western peninsula over three decades ago. In Borough Park there is also an extensive and carefully maintained eruv in place, but it too has been the subject of controversy.

Differing interpretations of Jewish law surrounded the erection of an eruv in

Borough Park in the late 1950s. This was an example of conflict among orthodox rabbis, not between orthodox and more reform minded Jews. As recent Jewish immigrants, mostly Hasidim, from Poland and Hungary began to expand their presence; they also brought their own traditions and religious customs to Borough Park. The eruv, which was used to network Orthodox families in many places of Eastern Europe for a long time, was originally challenged by the older Jewish community. Earlier settlers, mainly orthodox Lithuanian Jews, who settled in Borough Park beginning around 1910, saw it as a move toward religious liberalism. As the Hasidic population grew, reaching roughly 85% in 2000., the eruv was finally constructed in 1999-2000 over 225 blocks in Borough Park (Barnes, 2000). Numerous orthodox Jewish web sites with active blogging in Borough Park attest to the continuing controversial nature of this particular eruv, and to the different rabbinical interpretations of its validity (http://www.theyeshivaworld.com/coffeeroom/topic/eruv-in-brooklyn). Wherever eruvim are proposed or constructed there is likely to be some continuing controversy. In the most recent example, the lower Manhattan eruv mentioned above, the religious boundary markers go south to Houston Street and do not extend into the Lower East Side – one of the historic centers of Jewish life in America — because some Orthodox rabbis there do not believe that Manhattan's traffic patterns and street layout allow for valid eruvs (Chan, 2007).

Jewish Holidays and Outdoor Ritual Observance

There are a number of holidays over the Jewish religious calendar that brings congregants outdoors for religious ceremony. Increasingly these practices as they are carried out among people in the watershed communities are taking place at ocean beaches rather than at the Bay, although some still occur at Canarsie Pier and elsewhere along the northern perimeter of Jamaica Bay. Rabbi Tomsky of Belle Harbor's Ohab Zedek, explained that in addition to the Hosana Raba ritiual on the seveth day of Sukot, discussed above, one must include Taschlikh, Passover, Lag Bomer, and Birhat Hama, all of which bring congregants to the edge of water for prayer. The rabbi also mentioned that some couples seek to have weddings on the beach. This is a common practice among many different religious congregations in the watershed area, and one that usually occurs at city-managed beaches on the Rockaways or at Riis Park where wedding parties come by automobile to the ocean.

Tashlikh: On the afternoon of the first day of the Jewish New Year, Rosh Hashanah, "the theological message of the morning services is reinforced in a concrete way during the Tashlikh ceremony, during which individuals symbolically cast away their personal sins by throwing breadcrumbs into a flowing body of water. This action is accompanied by the recitation of biblical verses that evoke the human capacity for repentance and the beneficence of Divine forgiveness through the metaphor of casting sins into depths. Jews proceed to a body of running water, preferably one containing fish, and symbolically cast off (tashlikh) their sins. The ceremony includes reading the source passage for the practice, the last verses from the prophet Micah (7:19), "He will take us back in love; He will cover up our iniquities. You will cast all their sins into the depths of the sea." (http://www.myjewishlearning.com/holidays/Jewish_Holidays/Rosh_Hashanah/In_the_Community/Tashlikh.shtml)

Rabbi Allan Blaine, of Belle Harbor's Temple Beth-El and the peninsula's most authoritative voice on Jewish observance on the peninsula (due to his many decades of spiritual leadership) told us that on Tashlikh his congregants gather on the ocean at Beach 135th Street where they delight in greeting each other as well as old friends who may have returned to the neighborhood for the High Holy Days. On this occasion the gathering may number well over two hundred people. Similar gatherings occur on south shore ocean beaches from Coney Island and Brighten Beach, through Long Beach, wherever it is convenient for congregations to gather at the water's edge. Congregants from Canarsie pier also still gather at Canarsie Pier to perform Tashlikh prayers, but the gatherings are smaller than they were when Gateway was first established.

Hoshana Rabbah: As noted earlier, this is the Jewish holiday when willow branches that used to be cut along Jamaica Bay are used in religious rituals in the synagogues. Part of the festival holiday of Sukkot, this is known as the day of the final sealing of judgment, which began on Rosh Hashannah. "During Sukkot the world is judged for water and for the blessings of the fruit and crops. The seventh day of the festival is the final sealing and since human life depends on water, Hoshanna Rabbah is somewhat similar to Yom Kippur. Hence there are additional prayers and quests for repentance as on Yom Kippur. In the morning services of Hoshanna Rabbah, the congregation marches around the bima (alter) seven times, after which comes the beating of the aravah, willow branch. The aravahs are beaten against the floor five times. No blessing is recited over the beating of the aravah since it was merely a custom." http://www.ou.org/chagim/sukkot/hoshana.htm

Passover: Of all the Jewish holidays, Pesach (Passover), in the early spring, is the one most commonly observed, even by otherwise non-observant Jews. According to the 1990 National Jewish Population Survey (NJPS 1990), more than 80% of Jews have attended a Pesach Seder, the ritual meal celebrating escape from Egyptian bondage. The Passover Seder, is should be noted, was also the Last Supper. Rabbi Tomsky explained to us that on the eve of Pesach (Passover), members of the congregation in Belle Harbor gather in the temple's parking lot to rid them of everything containing yeast (Levin) that has been scrupulously cleansed from their homes. Jewish custom instructs its practitioners that "After the cleaning is completed, the morning before the seder, a formal search of the house for chametz is undertaken, and any remaining chametz is burned (http://www.jewfaq.org/holidaya.htm) At congregation Ohab Zedek, Rabbi Tomsky explained that in the past this waste was burned in a bonfire, but now for safety reasons it is disposed of through additional services of the New York City sanitation department. Some other congregations of the watershed area may continue to burn their Levin, while in other cases there are web sites that offer advice for how to dispose of the materials, including selling it on a special web site so that it is not wasted.

Lag B'omer: Another spring holiday, usually occurring in May but reckoned according to the Jewish calendar, this is also an occasion for outdoor worship and the use of bonfires.

> --The name of this Jewish observance refers to the 33rd day of the counting of the Omer. An "omer" refers to a sheaf of barley or wheat. In the book of Leviticus, it is written that God commanded people to make an offering of a sheaf of barley on each of the 50 days between Passover and Shavuot. The day number was announced after the evening service, and in time this ceremony came to be known as the "counting of the Omer".
>
> The reason why the 33rd day of this period was singled out may have something to do with an ancient pagan festival that was celebrated at the same time. Another story claims that a plague attacked Rabbi Akiba's students in the second century CE suddenly stopped on this day. Many Jewish people also mark this date by remembering the death of Rabbi Shimon bar Yochai, who was one of Rabbi Akiva's students. In any case, this observance represents a break in the season between Passover and Shavuot.(http://www.timeanddate.com/holidays/us/lag-b-omer)

Since lighting bonfires in public places, including the ocean and bay beaches of the Jamaica Bay and the Rockaway Peninsula require permits, in the post 9/11 period it

appears that there are fewer such bonfire rituals in the watershed area than there were three or four decades ago.

Birkat HaChama, The Blessing on the Sun: This holiday occurs infrequently, the last time in April 2007, but when it does it is the occasion for outdoor prayer throughout the Jewish world. According to Rabbinic Law the blessing of the sun must occur every 28 years, at the very time at which the sun will be in the same place, and at the same time of day on the same day of the week, as when it was first "hung" by the Creator. This solar cycle has been observed in Jewish tradition for thousands of years (http://www.israelnationalnews.com/News/News.aspx/130602). Like many public religious rituals, it has been the occasion for embarrassing incidents as the authorities and members of the wider public sought to understand what appeared to them as a foreign and perhaps threatening gathering. Such incidents do also serve as learning opportunities on both sides of the religious boundaries, as this 1897 episode from the Jewish history of settlement in New York City indicates:

> "Orthodox Hebrews in every part of the world celebrated yesterday what is familiarly known among them as 'the new sun.' ... The celebration in New York was spoiled for some hundreds of people by the interference of two park policemen with a gathering in Tompkins Square, the arrest there of Rabbi Wechsler, and the flight of Rabbi Klein.
>
> "Rabbi Wechsler and Rabbi Klein, who are the heads of large east side congregations, decided to call their people to meet in Tompkins Square. Nobody was in charge of the services, and nobody thought of obtaining a permit for holding a public meeting, as required by city ordinance. The Hebrews gathered by hundreds. ... By 8 o'clock the square and the sidewalks around it were crowded. Rabbi Wechsler arrived about that time, and was astonished to see Rabbi Klein running away at full speed. This last phenomenon was explained a moment later by the appearance of Park Policeman Foley, puzzled and excited.
>
> "The celebration is rather a complicated matter to explain to anybody. Rabbi Klein's knowledge of English is slight, while Foley's faculties of comprehension of matters outside of police and park regulations and local events are not acute.
>
> "The attempt of a foreign citizen to explain to an American Irishman an astronomical situation and a tradition of the Talmud was a dismal failure.
> (*New York Times* 1897 cited at http://www.israelnationalnews.com/News/News.aspx/130602)

Congregations, Informal Prayer Groups, Official Permits.

The episode in Tomkins square park more than 113 years ago is still extremely relevant to situations facing park managers at Gateway and elsewhere when religiously motivated groups appear suddenly on park places and facilities. While it would be almost inconceivable today for this much misunderstanding to be directed against Jewish worshippers, failure to obtain appropriate permits still occurs. This is especially true of religions whose practitioners are more recently established in the city, as we saw in the case of the Hindu populations of the watershed area. Lack of well defined congregations that have corporate identities and official religious leader tends also to be true of all the practitioners of the various forms of Youraba and other religious of African origin. Like the Jews at the turn of the twentieth century, followers of Santeria and other related African rites are not well understood, nor do their adherents always understand the rules of use of public space.

Santeria and Related Religious Practices

Gateway personnel frequently find remains of chickens and other animal sacrifice offerings at Plum Beach, Cross Bay Boulevard, Floyd Bennett Field, and other small beach and marsh locations along the perimeter of Jamaica Bay. If they infrequently encounter the people who may leave these ritual remains in or near the water, it is partly because their religious activities are most often performed at night. While they may be confused with the remnants of Hindu practice, in fact these are often traces of religious rituals of the Santeria and related faiths. "Santeria (The way of the Saints) is a this writing the most widespread branch of the African religious tradition in the Watershed area. It is an Afro-Caribbean religion based on Yoruba beliefs and traditions, with some Roman Catholic elements added. The religion is also known as La Regla Lucumi and the Rule of Osha." (http://www.bbc.co.uk/religion/religions/santeria/history/growth.shtml). Carribbean people of African slave descent, both of African American, English (Jamaican, Trinidadian, etc.) Spanish (Dominican, Puerto Rican, Cuban) and French (Haiti) colonial backgrounds, may be practitioners of one of the derivations of original Youraba religious beliefs and practice.

Santeria is known as a 'syncretic' religion because it combines elements of a number of religions, especially Christianity and Yoruba religion. Today it has grown beyond its Yoruba and Catholic origins to become a religion in its own right, although as practiced in the Jamaica Bay watershed, it remains somewhat unknown to the general public.

As a set of religious practices that derive from a common African religion, it nonetheless has many variants and no central organization, although there are organizations like the National African Religion Conference which ordain priests (with no exclusive control over the vast range of variations in practice) and provide other services to adherents (http://www.narcworld.com/events.html).

The religion is often practiced in private, in homes and small gathering places. As in Hinduism, many of the religious celebrations and practices require access to flowing water and other natural features that are found around Jamaica Bay. People who follow particular Santeria practices may also be equally involved in Catholic or other religious congregations. The Roman Catholic element in Santeria is most obvious in the way Orishas are associated with Catholic Saints such as:

> Saint Barbara [Shangó], who embodies justice and strength, and is associated with lightning and fire
> Our Lady of Charity [Ochún] - the Yoruba goddess of the river, associated with water, yellow, sweets, money, and love
> Saint Lazarus [Babalú-Ayé] - who is associated with the sick
> Followers of Santeria are often (nominal) Roman Catholics as well. Catholic symbols are sometimes used in Santeria rituals.

Holy Books: Santeria has no scriptures and is passed on by word-of-mouth. Some estimates go as high as a hundred million Santeria believers worldwide (Cros Sandoval , 1996Curry, 1991). From time to time city beat reporters are assigned to do stories about Santeria, which invariably note that the religion is gaining adherents whose origins are not African or immigrant:

> Once dismissed as a ghetto religion practiced only by the Caribbean poor and uneducated, Santeria has a growing following among middle-class professionals, including white, black and Asian Americans.
>
> There are police officers in New York who pray to Obatala, the father of all deities, or orishas, before they slip on their gun belts.
>
> There are lawyers and professors, civil servants and musicians whose homes are filled with altars laden with flowers, rum, cake and cigars to keep the gods happy and helpful. Many dress in white to symbolize purity.
> (Lizette Alvarez, After Years of Secrecy, Santeria Is Suddenly Much More Popular. And Public, *New York Times* 27/01/1997)

Mary Curry, whose doctoral dissertation on Yoruba religious deities and outdoor observance, Making the gods in New York: the Yoruba Religion in the Black Community (1991) is one of the best available sources on the religion and its practitioners in New York City, observes that its followers believe in a number of spirits, or Orishas. The religion emphasizes building relationships between human beings and the Orishas, who are powerful, but mortal, spirits. An Orisha is a manifestation of Olodumare (God), similar in some senses to the concept of angels in some Christian belief systems. Followers believe that these spirits will give them help in life, if they carry out the appropriate rituals, and enable them to achieve the destiny that God planned for them before they were born. Initiates can perceive Orishas in the physical universe, and the whole community can share in their presence when they possess a priest during some rituals.

Variants of the Yoruba religion (Akan, Candomble, Ifa Orisha, Santeria Voodoo, Yoruba) have complicated histories that are inter-twined with that of slavery and with the continuing African diaspora to the Western Hemisphere. As shown in Chapter 3 of this study, the most rapidly growing population segment of the Watershed area is from the Carribbean, and there is a growing influx of recent immigrants directly from Africa. At this writing there are over 1.2 million people of African descent living in the Watershed, comprising over 60% of its population. It is extremely likely; therefore, practitioners of Santeria and related religions of Yoruba origin will continue to present themselves in public places in the coming decade.

Accommodating these practices in public places is not an easy task for park managers as any Internet search using the terms "Yoruba religious practices, public space" will quickly reveal in news reports of hundreds of conflits and incidents in cities throughout the United States. The U.S. Constitution ensures protection of religious freedoms. But opponents of animal sacrifice believe that the practice represents cruelty. Others object to finding remains disposed of in commercial trash bins, or in parks. Pichardo's Church of the Lukumi Babalu Aye in Hialeah, Florida was at the center of a landmark 1993 case that went to the United States Supreme Court. Most police officials and animal-rights activists have come to concede that the resulting decision affirmed sacrifice as a legal practice. The ruling largely has been regarded as a sanction of animal sacrifice. http://www.northeasttimes.com/2002/0821/animals.html

> In the Hialeah case of 1993, Justice Kennedy in his decision said:
> The Santeria faith teaches that every individual has a destiny from God, a destiny fulfilled with the aid and energy of the orishas.The

basis of the Santeria religion is the nurture of a personal relation with the orishas, and one of the principal forms of devotion is an animal sacrifice. According to Santeria teaching, the orishas are powerful but not immortal. They depend for survival on the sacrifice.

Assessment: Religious Tradition and Attachments to Resources

In each case of religious practice considered in this chapter, the nature of the religious attachment is to a convenient place with flowing water. In no case is a particular place in Jamaica Bay unique from a religious viewpoint as "the place we must go, and where our ancestors have gone before us." People who could have claimed that depth of spiritual attachment vanished early in the Bay's settlement history; the locations of their sacred places are largely unknown. But this does not diminish the religious importance of Gateway resources for people of more recent settlement histories in the Jamaica Bay Watershed.

Religious motivations to use places along the water result in a variety of issues as we have seen in the case of each of the religions. And the use of resources in each case creates different priorities for park managers.

The Hindu population is large and quickly establishing itself near Jamaica Bay, so that a number of locations, and especially Cross Bay Boulevard and Broad Channel, are quite popular for ritual uses. This study reviews some of the on-going contacts and outreach Gateway staff is making with the relevant congregations. We have provided additional contacts and viewpoints from Hindu leaders and local scholars that can help enhance lines of cooperation and communication.

The Jewish population of the Jamaica Bay Watershed area is still large and extremely active even if there are declining numbers and aging congregations in some neighborhoods. The history of issues like the nearby eruv and the uses of natural resources like willows from the bay shores offers insight into the changing nature of Jewish religious practice and cultures in the Watershed. At present, however, there is not a great Jewish religious presence in the public areas Gateway administers in Jamaica Bay.

African religious practices, those derived from Yoruba spititual traditions as introducted through slavery into the New World were no doubt present throughout the colonial settlement history of Jamaica Bay. Blacks living on Barren Island when it was considered a putrid place, beyond lands end, were likely familiar with Saint Barbara and other Orishas. It is a religion with a history in the area that deserves to be brought out of the closet and there are ample signs that this process is beginning (http://www.religious-

tolerance.org/santeri1.htm). Gateway could help stimulate this development, a subject to which we return in the next and final chapter.

Chapter Six
Changing Populations, Changing Use of Jamaica Bay Resources

> A much greater political constituency for Jamaica Bay must be created. Otherwise, it will be difficult, if not impossible, to attract necessary public funding and to ensure that government decision makers consistently consider the bay's protection to be a priority.
> (Jamaica Bay Watershed Protection Plan, June 29, 2006)

This ethnographic inventory and assessment has revealed a number of important changes in the relationship of cultural groups in the Jamaica Bay watershed area to the bay's resources. First and foremost is the finding that over the past forty years of Gateway management there has been a significant increase in the racial and ethnic diversity of the population most accessible to Gateway's Jamaica Bay unit. A second finding is that many of the historic legacies of development around the Bay and throughout the watershed continue to exert powerful influences on who uses and who does not use its resources. A third result of the analysis is that newer populations are using the shores of Jamaica Bay for religious gatherings and ritual purposes that present continuing new challenges to Gateway management, while more established religious groups appear to be making less use of Jamaica Bay resources than was true earlier in Gateway's history. In this chapter we return to these findings to discuss some of their implications for Gateway's management of Jamaica Bay resources.

NPS and Gateway in Jamaica Bay

People we have spoken to for this inventory and assessment have offered many suggestions for how Gateway can respond to their needs. This does not mean the authors themselves agree with these comments. Also, there are numerous reports available about Gateway's success and problems in meeting its mission at Jamaica Bay and at its other locations. This report is not intended to present another analysis of the Park's achievements and failures. Nor would it be helpful to suggest programs and strategies that depend on scarce public funds or significant increases in staff that are not likely to occur in a period of possible retrenchment. On the other hand, we do frame suggestions for addressing the challenges posed by changes in the watershed's population over the past decades in ways that can address the consensus that constituency building is a high priority for Gateway at Jamaica Bay and elsewhere.

New Populations, Persistent Challenges

Demographic analysis of the Jamaica Bay Watershed (Chapter 3) showed that over 60 percent of the population is now composed of non-whites, primarily of Hispanic and Carribbean origins. African American populations in Brownsville (in particular) declined during the 1980s, but in Central Brooklyn remain l an extremely important segment of the black population. Although the neighborhoods directly adjacent to Jamaica Bay have remained largely white of Irish, Italian, and Jewish backgrounds, as was true in the early 1970s, these enclaves are becoming ever more a minority presence in the larger Watershed population. These are relatively new demographic changes, especially as regards the influx of foreign-born residents from Guyana who are Hindu practitioners, and steady increases in Haitian and other practitioners of one or another of the Yoruba-based African religious traditions including Santeria. It is also true that earlier in Gateway's history there were concerted efforts to enlist the support and participation of representatives of more of the Central Brooklyn neighborhoods and communities. Given the scale of population change in the Watershed since Gateway was created, and given the increasing presence of religious practitioners from newer population groups, renewed efforts to engage with representatives of these new populations can help address the consensus that Gateway would benefit from more constituency building.

Earlier in Gateway's history, outreach efforts to the minority neighborhoods and populations of Central Brooklyn and Far Rockaway centered on school programsemplouyment programs like Job Corps and Youth Conservation Corps, and engagement with local business leaders who might become engaged with the Park Service through small business contracts. In a new era of Gateway planning and revival of its advocacy groups, more emphasis could be placed on the way interpretive initiatives and programs can help build new constituencies.

Review of the history of settlement and cultures in and around Jamaica Bay points to a number of areas where there needs to be more historical research, including oral histories, and more use of local historical materials in interpreting Jamaica Bay's changing resources. New historical and interpretive initiatives could directly and indirectly address the legacy of racial tensions and violence around the Bay and provide more common ground for inter-group understanding in the region. Additional interpretation and programs about the history of the Barren Island settlement is a good example of how this approach might be implemented at Gateway.

What is the settlement history of black people in and around Jamaiza Bay?

This report would suggest that there is a lot more to be done by local historians, ethnogaphers, educators, and community activists in developing knowledge about the region's racial settlement history and presenting its relevant aspects to younger people who visit gateweay and attend schools in the Watershed area where the history is most salient. This is a subject of wide interest not only to members of the older and newer racial populations in the Watershed, but to the general public as well. It also would further connect interpretive efforts at Gateway with successful projects like the Weeksville Heritage Center in Central Brooklyn.

Largely a dream at the time Gateway was assuming management of Jamaica Bay resources, the idea of developing the early African American free slave settlement at Weeksville as a restored historical site has made enormous strides and is becoming a major cultural presence for area residents, as this recent web statement indicates:

> In October 2009, Weeksville began on-site construction of a new 19,000 square foot Education and Cultural Arts Building (expected to receive LEED Gold Certification), set to open in early 2012. With this new building comes an unprecedented opportunity for expanded research, education and programming. The new building will house a performance space, exhibition space, education and workshop rooms, a Resource Center, and media lab. The expansive grounds will be landscaped to reflect 19th century agricultural features. (http://www.weeksvillesociety.org/?page_id=37)

The Weeksville Heritage Center (WHC) "documents and preserves the history of the free and intentional 19th century African American community of Weeksville." Just eleven years after the abolition of slavery in New York, "James Weeks, a free African American, purchased land on the edge of the settled areas of Brooklyn and . This purchase marked the establishment of Weeksville, a village of free African Americans – laborers, laundresses, craftsmen, doctors, entrepreneurs and professionals – who worked and thrived in New York throughout the 19th and early 20th centuries. A vibrant and self-sufficient community, Weeksville's residents established schools, an orphanage, an elderly home, churches, benevolent associations, newspapers, and participated in anti-slavery activities."

The Barren Island community, as we have seen earlier, was also home to African Americans, although this history is not yet well documented or understood. In the following exchange, a New York Times reporter, Daniel Schneider (2009), answers a reader

who asks: “How did Dead Horse Bay, the inlet at the southwestern end of Floyd Bennett Field in Brooklyn, come by its rather gruesome name?”

> From the 1850’s until the 1930’s, the carcasses of dead horses and other animals from New York City streets were used to manufacture glue, fertilizer and other products at the site. The chopped-up, boiled bones were later dumped into the water. The squalid bay, then accessible only by boat, was reviled for the putrid fumes that hung overhead. A rugged community of laborers, many of them Irish, Polish and Italian immigrants, lived in relative isolation on neighboring Barren Island, which shared the bay’s unsavory reputation.
> http://query.nytimes.com/gst/fullpage.html?res=980DE3DB153FF93BA25754C0A96F958260

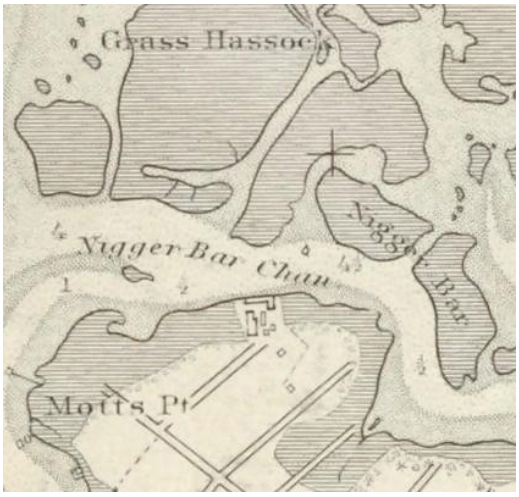


Image 6.1 Nigger Bar Channel Hendrick 2006

This is a very partial and inaccurate presentation of the facts. We have seen that some of the Barren Island settlers were of African American origins and lived and worked in a racially integrated community, at least for some of the island’s history. There are people writing on the internet who have, or had, grandparents who lived in this community before it was razed and have left memories of their time there. There is the possibility of a lot more oral history documentation about people like Jane Shaw as well as aspects of the African American presence there. This subject then begins to address larger questions about connections to the Bay by people of color who, as we see in the Weeksville example, were living somewhat more in the interior of Brooklyn and present day Queens (especially Jamaica). Perhaps some of the commitment and energy, as indicated in involvement of school children and local historians and activists cited below, that stimulated the Weeksville success could be brought to Gateway:

> Shortly following their discovery, the historic houses were threatened due to urban renewal plans. Joan Maynard, the first Executive Director of the early "Weeksville Society," led community members and youth groups in a sustained fight to save the houses. Using the archaeological evidence they uncovered, students from PS 243, activists, historians, and archaeologists testified before the New York City Landmarks Commission to save the historic Hunterfly Road houses from demolition. They were granted landmark status in 1971, thereby preserving the legacy of Weeksville. In 2005, all three houses were fully restored and opened to the public for the first time in the history of the organization.

The Web has made it far easier for people to trace their family histories and to become involved in local historical projects like Weeksville, (and, potentially one like it about Barren Island and other Jamaica Bay settlements), as these unsolicited responses blogs on the Weeksville site exemplify:

> Kandee Cooks says: August 27, 2009 at 10:20 am
> My maternal great-grandfather (Moses P. Cobb) purchased a home in Weeksville in the 1800's. He was born a slave in 1856 in Kinston, NC. He became his neighborhood's first black policeman in 1892. So, I know all about Weeksville. http://brooklynrail.org/2003/10/local/lets-make-a-landmark-bed-stuys-weeksville-becomes-a-tourist-attraction

> Dominic Rickert says: October 13, 2010 at 10:54 pm Interesting, my father and family grew up in one of those houses. Not only an African American neighborhood as my grandparents were a biracial couple.

Some aspects of the settlement history of Jamaica Bay are well known and well documented, and deserve further study and documentation, like the razing of bay bungalows during the Moses period. This history and its background demands a greater presence in the eventual interpretation of Jamaica Bay's history at Gateway. And so does the lesser-known history of African American settlement in and around the Bay. For example, the widely acclaimed pictoral history (Hendrick 2009) of Jamaica Bay includes a detail of a 1901 City of New York map of Jamaica Bay showing near present day Innwood on the eastern edge of the Bay that there was a place called "Nigger Point." The editor explains that, "The names of places around the bay were often determined by their characteristics of inhabitants. Historians say this point, located in today's Inwood, probably either had dark sands or was home to African Amerians after the Civil War" (Hendrick 2006 p39). The reader is left to wonder which explanation to choose. In the 1911 nautical chart introduced in this report's Chapter 2, a detailed view of the same area ten years

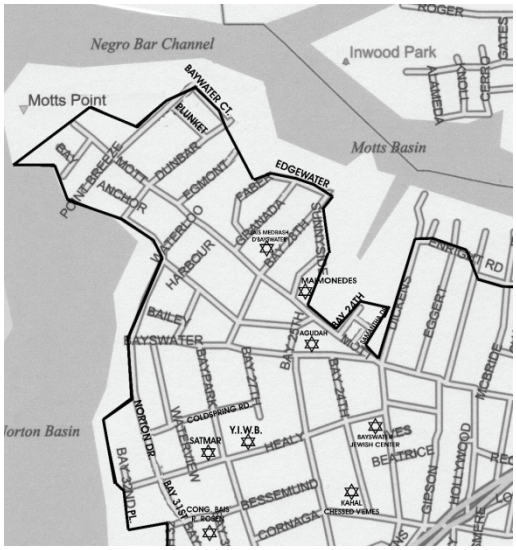


Image 6.2 Far Rockaway Eruv

later shows similarly racial naming of bay features in Far Rockaway near Innwood, but not all the same names appear in this chart as in the 1901 document. In a map online (see at left) showing contemporary Orthodox residents of the Bayswater neighborhoods of Far Rockaway the boundaries of the eruv on that part of the Peninsula, the Bay nomenclature has been rendered more politically correct, as it is in current nautical charts of the Bay. But the origins of the naming remains a mystery that demands further research.(2006 map at http://www.yiwb.org/ERUV%20Grayscale7-9-06.pdf) Very little material is yet available, about the history of the Innwood community, and while there appears to be a lot of related material available from Jamaica historical sources, it does not appear that any of this has been put together in a thorough history of African American racial settlement in the Watershed.

As these examples suggest, there remains a lot of research and development to be done, much of it by local scholars and history enthusiasts, to enable Gateway and other cultural institutions of the area to use history as a means of outreach to the populations hungry to learn more about their relationship to the city and to the resources of the Jamaica Bay estuary. This dimension of the Watershed's history has great potential for correcting current assumptions about who the people of the bay were and are today. The broader study of settlement by ethnic, racial, and religious groups in the Watershed can also yield to lines of outreach to area religious groups.

Religous Claims on Gateway Resources and Environmental Awareness

What bearing does the use of Gateway and broader Jamaica Bay resources for religious ceremonies have on environmental awareness of the Bay and its restoration needs? From the analysis of ritual uses of Jamaica Bay resources, it would seem that the answer is "very little." There are exceptions, however. The twin disasters of 9/11 and American Airlines Flight 587 have brought Catholic congregations along the Peninsula outdoors along the Bay for commemorative visits and meditation of the waters and the city where so many local people sacrificed their safety and their lives. The question re-

mains as to how the Park Service might enhance its environmental mission in Jamaica Bay by drawing on the religious motivations that groups have to use bay resources. Granted, as we have shown in Chapter 5, this is a tricky area for any public agency to take on. Still, it is a useful subject for further thought and creative action.

For Jewish residents of the Watershed we have shown that there appears to be diminishing involvement with Jamaica Bay resources by religiously motivated groups, although like any other population in the area, Jewish residents engage in all the activities, environmental, recreational, and cultural, that bring other people to Gateway and Jamaica Bay. There may be a Polish Yacht Club on a barge at the Barren Island Marina, but there is no lack of Jewish boat owners at the marina, as years of experience there can testify. As an organized presence around the Bay, however, Jewish congregations appear to be largely indifferent to issues of ecosystem restoration unless these have direct bearing on local eruvim or related matters.

As orthodox Jews increase their presence in the Watershed, however, the subject of religion and environrmetal concern takes on new relevance. The eruv boundaries shown above enclose nine Jewish institutions, and permit orthodox families to circulate within its perimeter. But these boundaries do not extend to the ocean, as do those of the Belle Harbor eruv discussed in Chapter 5. The eruvim are intended, in general, to allow some "carrying" on the Sabbath, and are not directly concerned with opening possibilities for contact with natural resources of the bay or ocean. Then in what ways are religious Jews engaged with the natural resources of the Jamaica Bay Estuary? The question quickly becomes Talmudic, but in ways that deserve further exploration in an urban region where Judaism and the Jewish experience are powerful influences on regional culture.

Orthodox Judaism: Present and Apart

Orthodox Judaism has its own divisions and differences in what is considered appropriate behavior according to sacred scriptures. Those Jewish residents of the region who are considered the "ultra orthodox" or "haredi," primarily those of Borough Park Hasidic congregations, or others in Far Rockaway and Lawrence:

> Haredi Judaism is the most theologically conservative form of Judaism. Haredi Judaism is often translated as ultra-orthodox Judaism, although Haredi Jews themselves object to this translation. They simply refer to themselves as Jews, and they consider more liberal forms of Judaism to be unauthentic.

> According to Haredi Jews, authentic Jews believe God wrote the Torah, strictly observe Jewish Law (halacha), and refuse to modify Judaism to meet contemporary needs. The word Haredi derives from the Hebrew word for fear (harada) and can be interpreted as "one who trembles in awe of God" (Isaiah 66:2,5).
> http://judaism.about.com/od/denominationsofjudaism/a/haredi.htm

Living apart in a world of Torah study, prayer, and family, without television and the Internet, how is the natural world perceived? Does it matter that one lives on the edge of Jamaica Bay? Samuel Heilman, an eminent sociologist of American Judaism, suggests that "nature" in the popular environmental sense of the word is not likely to be a concern. He writes that in haredi communities, "…science takes second place to the demands of religion as interpreted from the inerrant text by the authoritative moral guides--the Torah scholars. Hence, for example, the real world does not show us God's glory or messages--as Darwin once explained in his reflections on the religious significance of his findings--but, rather, faith and a dependence on its authorized interpreters tells us what we may understand and how we may use the real world,"(Heilman 2007, p.19) This past winter, for example, a record number of eruvs were breached by winter storms, causing hardship to orthodox families and prompting a reflective article in the New York Times with this comment by another important Jewish scholar:

> "Eruv is one of the only Jewish practices that forces the Jew and the Jewish community to confront the broader world," said Rabbi Adam Mintz of the Manhattan congregation Kehilat Rayim Ahuvim, who is writing a doctoral dissertation and book about the eruvim in North America. "This symbolic boundary around the neighborhood requires interaction with the broader community, whether it's asking permission, renting space, putting up strings and poles in front of someone's apartment." (Friedman, 2010)

By no means do all orthodox Jews turn their back on nature. Beyond the forced contact with managers of public space and others that the eruv requires,, there are worlds of spiritual variation and connection to nature. . This commentary from Judaism and: Ecology A theology of Creation, would be a good starting point for more develeoment of real intellectual connections between Jewish groups, especially students of all ages, and Jamaica Bay Resources:

> The endeavor to formulate a systematic environmental ethic is quite new to Judaism. For most of Jewish history, our sacred texts—from Hebrew Scriptures to Talmud to medieval philosophical, legal and mystical literature—have dealt with ecological issues incidentally, as they arose.

> Ecology was not a discrete area of inquiry; it was, instead, an integral part of the weave of relationships between God, humanity in general (and Israel in particular), and the rest of the natural world. Furthermore, Jewish positions on environmental issues have never been monolithic. In this, they reflect the multivocal nature of our tradition's texts and worldview. Still, contemporary scholars seeking a normative Jewish perspective on questions central to earth ethics can find much of interest in what is known as "the account of creation" (ma'aseh b'reishit) set forth in the first two chapters of Genesis and subsequent generations of commentaries on these texts. For the most part, Jewish teachers have resisted the tendency to read the Torah in a static, literalist manner. The Genesis narrative describes an ongoing process, for as the Jewish liturgy affirms, God renews the work of creation daily. Humans occupy a unique niche in this dynamic picture of God's world. We are both a part of nature and apart from it. (Fink, 2004)

Hinduism and Resource Sustainability

If separation and symbolic enclosure are themes in Jewish relations to Jamaica Bay resources, sustainability must be the question facing Gateway and its Hindu constituants. The growing presence of Hindu practitioners in the Watershed region has resulted in controversies at the Cross Bay Boulevard North Channel Bridge especially. Our chief finding in this regard was that key members of the largest community of Hindu practitioners, the Indo-Carribbeans, have been developing lines of communiation and knowledge of the resource issues and Park Service procedures. Consequently, community leaders believe that collaboration and continual education and outreach (every two or three months) will be the most effective way for ensuring that the Hindu community can practice their ancient traditions without fear or discomfort (Doobay 2010; Naidoo 2010; Veerapan 2010; Zuzworsky 2009). As we noted in Chapter 5:

> The overall consensus among key informants was that the relationship between the National Park Service and the Indo-Caribbean Hindu community must continue to evolve so that devotees can practice their faith without intimidation and without violating environmental laws. Key informants suggested a combination of fines and education, but stressed the need for collaboration with community leaders so that it did not appear as a top down process, devoid of community input. Dr. DhanPaul emphasized the need for constant dialogue with the Park Service, so as to establish a sense that they are "one community" with the Park.

What do different leaders and officials of agencies including the Park Service really understand by dialogue? Can dialogue dwell more on the needs of an ecosystem than on the needs of a particular religious group? How does modern Hinduism confront

matters of environmental quality and sustainability? The majority of Hindu practitioners are not East Asians, but Hindu Indians and others are also a growing segment of the regional population. Thus it is worthwhile to go beyond the problem that one side sees trash piled in the sand or floating in a shallow cove , where the other sees the remnants of sacred rites that will disappear in the infinity of the natural world. (Nor is it helpful, in the long run, that more Hindu worshippers seem to be moving their activities to the ocean beaches of the Rockaways.) To consider how the problem poses itself for the people involved, within their ethical-religious system, face the issues posed by their use of Jamaica Bay resources is worthwhile, but to do so requires creative approaches to creating occasions and programs where the issues can be fully considered. In just two ecologically relevant quotations from Hindu texts, the non-Hindu reader can begin to see that there is much collaborative thinking to do:

> O Earth, O Mother, dispose my lot
> In gracious fashion that I be at ease.
> In harmony with all the powers of Heaven
> Set me, O Poet, in grace and good fortune!
> – Atharva Veda, "Hymn to the Earth"
>
> Everything in the universe belongs to the Lord.
> Therefore take only what you need, that is set aside for you.
> Do not take anything else, for you know to whom it belongs.
> – Isa Upanishad
> (http://www.tufts.edu/chaplaincy/Gen_PDF_Basic/hinduism.pdf)

African Religious Practices and Environmental Engagement

A growing population of current and potential religious practitioners, the practitioners of Yoruba religious traditions in the Watershed area don't have much direct, formal contact at Gateway, nor do they seem to have sought it as of this writing. Engagement would appear to be the thematic issue where uses of Jamaica Bay resources are concerned. As in the other cases of spiritual connection to Jamaica Bay resoures, it is not clear how particular places or environments are understood in any broader sense than that they provide the basic flowing water and privacy to conduct ceremonies. How then are the "resources" of Jamqaica Bay understood, perceived, experienced? These lead, again, to basic questions of what we get out of nature, how we connect it, if we do, to our spiritual lives, and how, if at all, it requires us to be stewards of earth's resources. And in the case of the religions of African orgins, how they are practiced is also a rich reflection of the great African diaspora. But there is no light or reflection when the practices and

their histories are hushed. In fact, one objective of broader discussions would be to further explore the many elements of Santeria and other African traditions in the Americas that directly link the worshipper to nature and natural resources, with emphasis on what responsibilities for stewardship these entail::

> The orishas of Santeria embody elements of nature. Changó is the mighty clap of thunder in rainstorm; Ochún is the sinuous grace of river water and freeflowing streams; Yemayá is the majestic maternal energy of the ocean; Ogun the solitude and strength of the ironmaking forest-dweller. For those who honor and cultivate these ancestral spirits, their aché (essential sacred energy; vital power) is concentrated in stones. Otanes. These lithic representations of the divinities' presence and power are collected from places associated with the natural element of each. Ochún's otanes come from riverbottoms and the banks of freshwater tributaries; those of Ochossi, the hunter king, come from inside the forest; the ritual stones of Changó are meteorites (thunderstones) or from the mountainous places where his energy is said to be strongest
> (http://ctl.du.edu/spirituals/Religion/otanes.cfm)

A good entry into the entire range of issues raised by interpreting the African origins of cultures om the Watershed are would be though partnerships with local colleges and the Weeksville Cultural Heritage Center and the Jamaica Public Library.

People of the Bay, in the "Land of No."

All the ethnographic and historical analysis in Chapter 4, People of the Bay, suggests that the Park Service at Gateway needs to place a high priority on making it clearer what its resource policies are and how they are intended to address the dual and often conflicting NPS mandate to "preserve and protect the resources of Jamaica Bay for present and future generations…" Clearly the new General Management Plan and accompanying environmental analysis will have to address this issue as a matter of highest priority.

One way to ensure awareness and understanding of the Park's rules and regulations would be to create a "Rules and Regulations" tab on the Gateway website where this information can be consolidated. Currently, information about rules and regulations, permitting, and policies are spread over several categories and several pages, making it difficult for Park visitors and Park communities to understand the rules and regulations (Jet skiing is one such example). It would also be helpful to place these rules and regulations in their social and ecological context, relaying to visitors and community members

how these policies advance Gateway's mission and the visitor experience.

As Chapter 4 argues, the "people of the bay," are those men, women and families who form especially strong attachments to Jamaica Bay and its creeks, marshes, and islands. Baymen like the Seamen, father and son, are at the top of a hierarchy of knowledge and experience on Jamaica Bay and it is for this reason that we devote considerable attention to their particular environmental world view. Like the baymen of other Long Island estuaries, they pursue what writers, journalists and social scientists continually describe as a "vanishing' occupation. The most celebrated of these accounts is Men's Lives: The Surfmen and Baymen of the South Fork(1986), Peter Matthiessen's portrayal of a disappearing way of life of the Long Island fishermen "whose voices--humorous, bitter and bewildered--are as clear as the threatened beauty of their once quiet shore." Larry Seaman Jr. exemplifies this occupation as it is practiced on Jamaica Bay. Unlike recreational users of the Bay, and those who form deep attachments out of a desire to protect the Bay's resources, the baymen are necessarily out on the waters in all kinds of weather and over a longer season than most others. Most importantly, they constitute an invaluable Jamaica Bay resource themselves due to their profound knowledge of the estuary. As Ben Gibberd writes of Seaman:

> For him this world is as familiar as Midtown's streets are to a cabdriver, and probably more so. He knows not only the contours of every marsh and inlet in Jamaica Bay from Hook Creek (the tiny inlet his house is on) to the Marine Parkway Bridge nearly 9 miles to the west, but also the contours that lie beneath the water. "I know every bump and dip," he says. "I could draw a map of it as good as the Geodesic survey they do."

Critics of the this literature point to its tendency to sentimentalize the baymen's work to the possible detriment of the more complex issues of resource management in ecologically endangered estuaries (Lang, 1995). But further research and outreach could inform the Park about how to capitalize on the positive attributes of their deep attachments to the Bay to inspire environmental protection (See the Environmental Protection Agency's 2002 Publication *Community Culture and the Environment A Guide to Understanding a Sense of Place*). Tapping into this sense of place could go a long way in developing community relations by demonstrating that the Park acknowledges, understands, and respects locals' relationships to Jamaica Bay. Further research, however, should be careful to explore best practices for capitalizing on this sense of place without being exclusionary to other groups or generations. Along these lines, it would be ben-

eficial to include cultural education/awareness of the other racial, ethnic, and religious groups who are increasingly using Jamaica Bay and its resources. Ideally, local communities' sense of place would also incorporate a sense of community, which acknowledges the diversity of an urban Park. Possibilities include development of brochures, "meet and greets," devoting part of the Herbert Johnson Lecture Series to cultural and social aspects of the Park, or interpretive exhibits. Including young people, especially adolescents and teenagers, will be another challenge to developing a sustainable constituency with the "people of the bay." Currently, this community is dominated by older generations. It is in the Park's interest to develop a younger, local constituency interested in preserving and protecting the social and natural resources of Jamaica Bay. Possibilities include youth-directed projects to document their family's history and connection to Jamaica Bay, oral history projects that span multiple generations (including pre-Gateway generations), teen-oriented nature programs, mentorship programs, or social networking opportunities directed toward teen usage of Gateway (Gateway's blog on Jacob Riis, albeit more oriented towards children, is a good example).

APPENDIX A

Percent Below Poverty Level by Neighborhood in Watershed 1980-2008

Brownsville/Ocean Hill

Neighborhood	Year		Total Population	Below Poverty
Brownsville/ Ocean Hill	1980	Number	103,276	46,502
		%		**45.0%**
	1990	Number	111,285	47,255
		%		**42.5%**
	2000	Number	114,262	47,138
		%		**41.3%**
	2008	Number	117,059	42,209
		%		**36.1%**

East New York/Starrett City

Neighborhood	Year		Total Population	Below Poverty
East New York/ Starrett City (BK)	1980	Number	127,701	37,722
		%		**29.5%**
	1990	Number	135,776	40,151
		%		**29.6%**
	2000	Number	143,427	44,739
		%		**31.2%**
	2008	Number	158,971	46,036
		%		**29.0%**

Flatlands/Canarsie

Neighborhood	Year		Total Population	Below Poverty
Flatlands/ Canarsie (BK)	1980	Number	168,890	14,150
		%		8.4%
	1990	Number	160,609	15,598
		%		9.7%
	2000	Number	190,396	23,399
		%		12.3%
	2008	Number	204,592	22,592
		%		11.0%

East Flatbush

Neighborhood	Year		Total Population	Below Poverty
E. Flatbush (BK)	1980	Number	132,549	25,857
		%		19.5%
	1990	Number	141,538	21,877
		%		15.5%
	2000	Number	146,623	29,297
		%		20.0%
	2008	Number	143,374	21,784
		%		15.2%

S. Crown Heights

Neighborhood	Year		Total Population	Below Poverty
So. Crown Heights (BK)	1980	Number	104,928	24,597
		%		23.4%
	1990	Number	117,947	20,569
		%		17.4%
	2000	Number	114,012	28,410
		%		24.9%
	2008	Number	111,359	23,829
		%		21.4%

Borough Park

Neighborhood	Year		Total Population	Below Poverty
Borough Park (BK)	1980	Number	134,896	24,468
		%		**18.1%**
	1990	Number	138,433	30,203
		%		**21.8%**
	2000	Number	160,633	47,707
		%		**29.7%**
	2008	Number	167,358	43,557
		%		**26.0%**

Flatbush

Neighborhood	Year		Total Population	Below Poverty
Flatbush (BK)	1980	Number	140,498	28,054
		%		**20.0%**
	1990	Number	158,925	26,166
		%		**16.5%**
	2000	Number	163,638	37,045
		%		**22.6%**
	2008	Number	165,495	30,149
		%		**18.2%**

Sheepshead Bay/Gravesand

Neighborhood	Year		Total Population	Below Poverty
Sheepshead/ Gravesand (BK)	1980	Number	138,393	13,474
		%		**9.7%**
	1990	Number	134,470	15,103
		%		**11.2%**
	2000	Number	150,967	26,570
		%		**17.6%**
	2008	Number	143,771	21,748
		%		**15.1%**

Bellerose/Rosedale

Neighborhood	Year		Total Population	Below Poverty
Bellerose/ Rosedale (Qns)	1980	Number	170,384	12,064
		%		7.1%
	1990	Number	179,367	13,438
		%		7.5%
	2000	Number	192,302	15,795
		%		8.2%
	2008	Number	206,270	15,324
		%		7.4%

Kew Gardens/Woodhaven

Neighborhood	Year		Total Population	Below Poverty
Kew Gardens/ Woodhaven (Qns)	1980	Number	107,323	11,374
		%		10.6%
	1990	Number	110,875	10,814
		%		9.8%
	2000	Number	140,173	20,891
		%		14.9%
	2008	Number	146,923	19,296
		%		13.1%

Jamaica

Neighborhood	Year		Total Population	Below Poverty
Jamaica	1980	Number	182,221	33,251
		%		18.2%
	1990	Number	196,260	30,829
		%		15.7%
	2000	Number	218,003	38,623
		%		17.7%
	2008	Number	219,013	29,695
		%		13.6%

Howard Beach/S. Ozone Park

Neighborhood	Year		Total Population	Below Poverty
Howard Beach/ So Ozone Park	1980	Number	105,628	11,405
		%		**10.8%**
	1990	Number	106,478	7,558
		%		**7.1%**
	2000	Number	129,660	15,666
		%		**12.1%**
	2008	Number	134,277	16,251
		%		**12.1%**

Rockaway

Neighborhood	Year		Total Population	Below Poverty
Rockaway	1980	Number	95,114	20,344
		%		**21.4%**
	1990	Number	101,646	23,714
		%		**23.3%**
	2000	Number	103,729	26,907
		%		**25.9%**
	2008	Number	117,738	23,435
		%		**19.9%**

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